

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

Type Test:

(See Instructions on Reverse Side)

Open Flow **BSI**  
 Deliverability

Test Date:  
6/28/2011

API No. 15  
15-023-20-111 - **0000**

Company Rosewood Resources, Inc.		Lease R. Walter		Well Number #5	
County Cheyenne	Location NESW	Section 9	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7/18/1980		Plug Back Total Depth 1505'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1470'	Perforations 1454'	To 1468'
Tubing Size <b>NONE - 2 3/8"</b>	Weight	Internal Diameter	Set at <b>1486'</b>	Perforations	To
Type Completion (Describe) Single (Conventional)		Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? <input checked="" type="radio"/> Yes / No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1402'		Pressure Taps Flange		Gas Gravity - G <sub>g</sub> .6	

Pressure Bulldup: Shut in 6-27 20 11 at 10:30  (AM) (PM) Taken 6-28 20 11 at 10:45  (AM) (PM)

Well on Line: Started 6-28 20 11 at 10:45  (AM) (PM) Taken 6-29 20 11 at 11:30  (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>i</sub> ) or (P <sub>e</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>e</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						40	54.4				
Flow						37	51.4			24	

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>s</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>
						27		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>e</sub>)<sup>2</sup> = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>e</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>e</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>e</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> or (P <sub>e</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>e</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	Choose formula 1 or 2: 1. P <sub>e</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> 2. P <sub>e</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup> divided by: P <sub>e</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	LOG of formula 1, or 2, and divide by: $\frac{P_e^2 - P_w^2}{P_e^2 - P_d^2}$	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

Garnell Geary  
For Company  
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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 R. Walter #5 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:   
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.

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Walter #5

St. Francis

St. Francis

Pumping Unit/Elec

June-11

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE	HRS	DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI							
6/1/2011		48	60	17	7.5	4	0	4	
6/2/2011		37	58	17	7.5	4	0	5	
6/3/2011		37	50	18	7.5	4	0	5	
6/4/2011		36	50	18	7.5	4	0	4	
6/5/2011		37	50	18	7.5	4	0	5	
6/6/2011		37	50	18	7.5	4	0	4	
6/7/2011		36	50	19	7.5	4	0	5	
6/8/2011		36	49	19	7.5	4	0	7	
6/9/2011		36	50	17	7.5	4	0	8	changed time clock to 8 hrs on
6/10/2011		36	49	19	7.5	8	0	16	
6/11/2011		36	50	20	7.5	8	0	17	
6/12/2011		36	50	21	7.5	8	0	15	
6/13/2011		37	50	21	7.5	8	0	5	12.5 min bt
6/14/2011		37	50	22	7.5	8	0	6	
6/15/2011		37	50	22	7.5	8	0	16	3.5 min bt
6/16/2011		38	61	22	7.5	8	0	17	
6/17/2011		40	53	23	7.5	8	0	16	
6/18/2011		39	52	23	7.5	8	0	15	
6/19/2011		39	52	23	7.5	8	0	16	
6/20/2011		39	53	24	7.5	8	0	16	
6/21/2011		39	52	24	7.5	8	0	15	
6/22/2011		40	53	24	7.5	8	0	17	
6/23/2011		61	76	15	7.5	8	1	16	3.25 min bt greased
6/24/2011		40	58	26	7.5	8	0	15	
6/25/2011		39	53	25	7.5	8	0	17	
6/26/2011		39	52	25	7.5	8	0	15	
6/27/2011		39	52	25	7.5	4	0	7	si squeeze well
6/28/2011		40	52	0	7.5	4	24	7	reopen well
6/29/2011		40	53	26	7.5	8	0	14	
6/30/2011		37	53	27	7.5	8	0	13	
7/1/2011		0	0	0	0	0	0	0	

Total

618

338

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 Wãiter.#5  
 St. Francis  
 St. Francis  
 Pumping Unit/Elec  
 July-11

DATE	Tubing Casing		STATIC	MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI						
7/1/2011		41	52	26	7.5	8	0	16
7/2/2011		40	52	26	7.5	8	0	14
7/3/2011		40	52	26	7.5	8	0	15
7/4/2011		40	53	27	7.5	8	0	17
7/5/2011		39	52	27	7.5	8	0	14
7/6/2011		41	52	27	7.5	8	0	19 3 min bt greased
7/7/2011		39	52	27	7.5	8	0	20
7/8/2011		39	52	27	7.5	8	0	17
7/9/2011		39	52	27	7.5	8	0	16
7/10/2011		39	52	27	7.5	8	0	14
7/11/2011		39	52	27	7.5	8	0	16
7/12/2011		39	52	27	7.5	8	0	13 4.5 min bt
7/13/2011		33	51	25	7.5	8	1	15
7/14/2011		38	51	25	7.5	8	0	12
7/15/2011		40	52	25	7.5	8	0	11
7/16/2011		40	52	25	7.5	8	0	12
7/17/2011		44	59	24	7.5	8	0	10
7/18/2011		41	54	24	7.5	8	0	11
7/19/2011		44	62	23	7.5	8	2	12
7/20/2011		44	55	24	7.5	8	0	13
7/21/2011		50	64	21	7.5	4	0	6 pu off hfp
7/22/2011		36	57	24	7.5	4	0	6 restart pu
7/23/2011		40	49	24	7.5	8	0	16 3.5 min bt
7/24/2011		40	50	24	7.5	8	0	15
7/25/2011		37	50	25	7.5	8	0	17
7/26/2011		36	49	25	7.5	8	0	18
7/27/2011		37	50	25	7.5	8	0	16
7/28/2011		38	50	25	7.5	8	0	17 3.25 min bt
7/29/2011		53	61	16	7.5	4	0	5 pu off at pole hfp
7/30/2011		39	58	26	7.5	4	0	6 started pumping unti
7/31/2011		39	54	24	7.5	8	0	16

Total

775

425

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Walter #5

St. Francis

St. Francis

Pumping Unit/Elec

August-11

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2011		39	51	25	7.5	8	0	16
8/2/2011		38	51	25	7.5	8	0	17
8/3/2011		37	50	25	7.5	8	0	17
8/4/2011		38	51	25	7.5	8	0	19 3 min bt greased
8/5/2011		38	51	24	7.5	8	0	17
8/6/2011		38	51	23	7.5	8	0	16
8/7/2011		38	52	22	7.5	8	0	15
8/8/2011		37	51	22	7.5	8	0	10 6 min bt
8/9/2011		38	51	22	7.5	8	0	16 pu off - restart
8/10/2011		35	49	22	7.5	8	0	14
8/11/2011		80	62	22	7.5	4	0	5 shut pumping unit off hfp
8/12/2011		66	73	12	7.5	0	0	0
8/13/2011		69	77	18	7.5	0	0	0
8/14/2011		75	85	13	7.5	0	0	0
8/15/2011		74	89	12	7.5	0	0	0
8/16/2011		39	69	22	7.5	4	0	5 restart pu
8/17/2011		84	71	9	7.5	4	5	5 pu off hfp
8/18/2011		42	72	16	7.5	4	4	5 restart pu
8/19/2011		54	64	20	7.5	8	1	16
8/20/2011		38	56	23	7.5	8	0	17
8/21/2011		37	50	23	7.5	8	0	16
8/22/2011		36	50	23	7.5	8	0	16
8/23/2011		70	50	24	7.5	8	0	17
8/24/2011		38	52	23	7.5	8	0	15
8/25/2011		41	52	24	7.5	8	0	10 6 min bt
8/26/2011		38	58	23	7.5	8	0	10
8/27/2011		41	51	24	7.5	8	0	9
8/28/2011		39	52	24	7.5	8	0	8
8/29/2011		38	52	25	7.5	8	0	9
8/30/2011		38	52	24	7.5	8	0	10
8/31/2011		38	52	24	7.5	8	0	16 3.5 min bt

Total

663

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