

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

Type Test:

- Open Flow **HST**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
6/1/2015

API No. 15  
023-20634-0000

Company Rosewood Resources, Inc.		Lease R. Moore		Well Number 13-28	
County Cheyenne	Location NWSW/4	Section 28	TWP 2S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 10/21/2005		Plug Back Total Depth 1789'		Packer Set at	
Casing Size 2 7/8"	Weight 6.5#	Internal Diameter 2.441	Set at 1789'	Perforations 1668'	To 1700'
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) Single (Conventional)		Type Fluid Production		Pump Unit or Traveling Plunger? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1700'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-1		20 15 at 1:50		(AM) (PM) Taken 6-4	
Well on Line: Started 6-4		20 15 at 2:05		(AM) (PM) Taken 6-5	
		20 15 at 2:05		(AM) (PM) Taken 6-5	
		20 15 at 2:05		(AM) (PM) Taken 6-5	

**OBSERVED SURFACE DATA**

Duration of Shut-in 96 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>o</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						178	192.4				
Flow						47	61.4			96	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>tt</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>n</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>d</sub>)<sup>2</sup> = 0.207  
(P<sub>o</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>s</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>s</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: $P_c^2 - P_w^2$	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 21 day of December, 20 15.

**KCC WICHITA** *Jamuel M. Martiny*

Witness (if any)

For Company

For Commission

**APR 07 2016**

Checked by

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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. Moore 13-28 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: 12/21/15

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**APR 07 2016**  
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Signature: *Jannell Matney*  
 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.

W439 WELL ID  
 R. Moore 13-28 LEASE NAME  
 West St. Francis FIELD  
 St. Francis AREA  
 None EQUIPMENT  
 June-15 DATE

DATE	Line PSI	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2015	140	140	153		0	24
6/2/2015	145	145	158		0	24
6/3/2015	172	172	185		0	24
6/4/2015	178	178	191		0	24
6/5/2015	106	106	119		5	0
6/6/2015	83	83	96		2	0
6/7/2015	76	76	89		2	0
6/8/2015	67	67	80		2	0
6/9/2015	53	53	66		2	0
6/10/2015	51	51	64		2	0
6/11/2015	50	50	63		2	0
6/12/2015	49	49	62		2	0
6/13/2015	49	49	62		2	0
6/14/2015	48	48	61		2	0
6/15/2015	48	48	61		2	0
6/16/2015	49	49	62		2	0
6/17/2015	48	48	61		2	0
6/18/2015	49	49	62		2	0
6/19/2015	62	62	75		2	2
6/20/2015	58	58	71		0	22
6/21/2015	99	99	112		2	0
6/22/2015	60	60	73		2	0
6/23/2015	46	46	59		2	0
6/24/2015	47	47	60		2	0
6/25/2015	47	47	60		2	0
6/26/2015	47	47	60		2	0
6/27/2015	47	47	60		2	0
6/28/2015	47	47	60		2	0
6/29/2015	47	47	60		2	0
6/30/2015	47	47	60		2	0
7/1/2015	-13	-13	0		0	0

Total

53

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W439 WELL ID  
 R Moore 13-28 LEASE NAME  
 West St. Francis FIELD  
 St. Francis AREA  
 None EQUIPMENT  
 July-15 DATE

DATE	Line PSI	Casing PSI	STATIC MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
7/1/2015	47	47	60	2	0
7/2/2015	47	47	60	2	0
7/3/2015	47	47	60	2	0
7/4/2015	47	47	60	2	0
7/5/2015	48	48	61	2	0
7/6/2015	54	54	67	2	2
7/7/2015	47	47	60	2	0
7/8/2015	47	47	60	2	16
7/9/2015	47	47	60	0	24
7/10/2015	166	166	179	0	14
7/11/2015	103	103	116	3	0
7/12/2015	80	80	93	1	0
7/13/2015	66	66	79	2	0
7/14/2015	49	49	62	2	0
7/15/2015	46	46	59	2	0
7/16/2015	47	47	60	2	0
7/17/2015	47	47	60	2	0
7/18/2015	47	47	60	2	0
7/19/2015	46	46	59	2	0
7/20/2015	46	46	59	2	0
7/21/2015	56	56	69	2	4
7/22/2015	47	47	60	2	0
7/23/2015	46	46	59	2	0
7/24/2015	46	46	59	2	0
7/25/2015	46	46	59	2	0
7/26/2015	46	46	59	2	0
7/27/2015	45	45	58	2	0
7/28/2015	45	45	58	2	0
7/29/2015	45	45	58	2	0
7/30/2015	45	45	58	2	0
7/31/2015	45	45	58	2	0

Total

58

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W439 WELL ID  
 R. Moore 13-28 LEASE NAME  
 West St. Francis FIELD  
 St. Francis AREA  
 None EQUIPMENT  
 August-15 DATE

DATE	Line PSI	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
8/1/2015	45	45	58		2	0
8/2/2015	46	46	59		2	0
8/3/2015	46	46	59		2	0
8/4/2015	45	45	58		2	0
8/5/2015	45	45	58		2	0
8/6/2015	45	45	58		2	0
8/7/2015	45	45	58		2	0
8/8/2015	45	45	58		2	0
8/9/2015	45	45	58		2	0
8/10/2015	45	45	58		2	0
8/11/2015	45	45	58		2	0
8/12/2015	45	45	58		2	0
8/13/2015	46	46	59		2	0
8/14/2015	46	46	59		2	0
8/15/2015	47	47	60		2	0
8/16/2015	48	48	61		2	0
8/17/2015	46	46	59		2	0
8/18/2015	46	46	59		2	0
8/19/2015	47	47	60		2	0
8/20/2015	47	47	60		2	0
8/21/2015	48	48	61		2	0
8/22/2015	48	48	61		2	0
8/23/2015	48	48	61		2	0
8/24/2015	48	48	61		2	0
8/25/2015	50	50	63		1	0
8/26/2015	48	48	61		2	0
8/27/2015	47	47	60		2	0
8/28/2015	46	46	59		2	0
8/29/2015	48	48	61		2	0
8/30/2015	51	51	64		2	0
8/31/2015	53	53	66		2	0

Total

61

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