

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow **BSI**
 Deliverability

Test Date:
6/1/2015

API No. 15
023-20665-0000

Company Rosewood Resources, Inc.			Lease Northrup		Well Number 43-33
County Cheyenne	Location NESE	Section 33	TWP 2S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 4-1-2006		Plug Back Total Depth 1766'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1767.06'	Perforations 1616'	To 1642'
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) Single (Conventional)		Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? <input checked="" type="checkbox"/> Yes / No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	Gas Gravity - G _g .6
Vertical Depth(H) 1642'		Pressure Taps Flange			(Meter Run) (Prover) Size 2"
Pressure Buildup: Shut in 6-1		20 15 at 11:45		(AM)(PM) Taken 6-4	20 15 at 11:55 (AM)(PM)
Well on Line: Started 6-4		20 15 at 11:55		(AM)(PM) Taken 6-5	20 15 at 1:45 (AM)(PM)

OBSERVED SURFACE DATA

Duration of Shut-in 96 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or Prover Pressure psig (Pm)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _t) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _t) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						89	103.4				
Flow						45	59.4			96	

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
						12		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_o)² = _____ : (P_w)² = _____ : P_d = _____ % (P_c - 14.4) + 14.4 = _____ : (P_o)² = 0.207
(P_o)² = _____

(P _c) ² - (P _o) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _d ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²	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.

Witness (if any)

KCC WICHITA

James M. Martiny
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 Northrup 43-33 gas well on the grounds that said well:

(Check one)

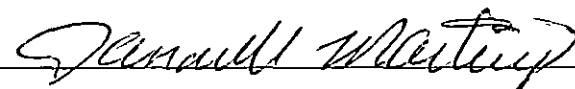
- is a coalbed methane producer
- is cycled on plunger lift due to water
- is a source of natural gas for injection into an oil reservoir undergoing ER
- is on vacuum at the present time; KCC approval Docket No. _____
- is not capable of producing at a daily rate in excess of 250 mcf/D

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

KCC WICHITA

Signature: _____



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Title: Production Assistant

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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.

W2059 WELL ID
 Northrup 43-33 LEASE NAME
 West St. Francis FIELD
 St. Francis AREA
 None EQUIPMENT
 June-15 DATE

DATE	Line PSI	Casing PSI	STATIC MCF	SPM	CYCLE DOWN	HRS	Water BBLs	REMARKS (Maximum length 110 characters)
6/1/2015	76	76	89	0	0	0	24	0
6/2/2015	85	85	98	0	0	0	24	0
6/3/2015	88	88	101	0	0	0	24	0
6/4/2015	89	89	102	0	0	0	24	0
6/5/2015	88	88	101	0	0	0	0	0
6/6/2015	81	81	94	13	6	12	0	0 turn on p u
6/7/2015	74	74	87	13	6	12	0	12
6/8/2015	65	65	78	16	6	12	0	12
6/9/2015	51	51	64	13	6	12	0	13
6/10/2015	49	49	62	13	6	12	0	13
6/11/2015	48	48	61	12	6	12	0	13
6/12/2015	47	47	60	12	6	12	0	12
6/13/2015	47	47	60	12	6	12	0	13
6/14/2015	47	47	60	12	6	12	0	14
6/15/2015	46	46	59	12	6	12	0	13
6/16/2015	47	47	60	12	6	12	0	12
6/17/2015	46	46	59	12	6	12	0	12
6/18/2015	48	48	61	12	6	12	0	12
6/19/2015	61	61	74	11	6	6	2	6
6/20/2015	57	57	70	2	6	0	22	0
6/21/2015	80	80	93	5	6	0	0	0
6/22/2015	59	59	72	15	6	6	0	6 started pu, builds pressure no water yet
6/23/2015	45	45	58	12	6	12	0	12
6/24/2015	45	45	58	12	6	12	0	12
6/25/2015	45	45	58	12	6	12	0	12
6/26/2015	45	45	58	12	6	12	0	12
6/27/2015	45	45	58	13	6	12	0	12
6/28/2015	45	45	58	13	6	12	0	12
6/29/2015	46	46	59	13	6	12	0	12
6/30/2015	46	46	59	13	6	12	0	12
7/1/2015	-13	-13	0	0	0	0	0	0

Total

297

259

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W2059 WELL ID
 Northrup 43-33 LEASE NAME
 West St. Francis FIELD
 St. Francis AREA
 None EQUIPMENT
 July-15 DATE

DATE	Line PSI	Casing PSI	STATIC MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)	
7/1/2015	46	46	59	13	6	12	0	12
7/2/2015	45	45	58	12	6	12	0	12
7/3/2015	45	45	58	11	6	12	0	12
7/4/2015	46	46	59	11	6	12	0	12
7/5/2015	46	46	59	10	6	12	0	12
7/6/2015	52	52	65	11	6	0	2	6 pu off belts broke
7/7/2015	45	45	58	9	6	0	0	0
7/8/2015	45	45	58	9	6	0	16	0 left off for comp work
7/9/2015	55	55	68	0	6	0	24	0
7/10/2015	90	90	103	0	6	0	14	0
7/11/2015	87	87	100	1	6	0	0	0
7/12/2015	77	77	90	8	6	0	0	0
7/13/2015	65	65	78	13	6	6	0	6 Fixed belts and turned back on
7/14/2015	47	47	60	11	6	12	0	12
7/15/2015	44	44	57	10	6	12	0	12
7/16/2015	45	45	58	11	6	12	0	12
7/17/2015	45	45	58	11	6	12	0	11
7/18/2015	45	45	58	11	6	12	0	11
7/19/2015	44	44	57	11	6	12	0	11
7/20/2015	44	44	57	12	6	12	0	11
7/21/2015	54	54	67	11	6	12	4	11
7/22/2015	45	45	58	12	6	12	0	11
7/23/2015	44	44	57	12	6	12	0	11
7/24/2015	44	44	57	12	6	12	0	11
7/25/2015	44	44	57	12	6	12	0	11
7/26/2015	44	44	57	12	6	12	0	11
7/27/2015	43	43	56	12	6	12	0	11
7/28/2015	43	43	56	13	6	12	0	11
7/29/2015	43	43	56	13	6	12	0	11
7/30/2015	43	43	56	13	6	12	0	11
7/31/2015	43	43	56	13	6	12	0	11

Total

320

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W2059 WELL ID
 Northrup 43-33-1 LEASE NAME
 West St. Francis FIELD
 St. Francis AREA
 None EQUIPMENT
 August-15 DATE

DATE	Line PSI	Casing PSI	STATIC MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2015	44	44	57	13	6 12	0 12	
8/2/2015	44	44	57	13	6 12	0 12	
8/3/2015	45	45	58	12	6 12	0 12	
8/4/2015	43	43	56	13	6 12	0 12	
8/5/2015	43	43	56	13	6 12	0 12	
8/6/2015	43	43	56	13	6 12	0 12	
8/7/2015	44	44	57	12	6 12	0 12	
8/8/2015	43	43	56	13	6 12	0 12	
8/9/2015	43	43	56	13	6 12	0 12	
8/10/2015	44	44	57	13	6 12	0 12	
8/11/2015	44	44	57	13	6 12	0 12	
8/12/2015	44	44	57	13	6 12	0 12	
8/13/2015	44	44	57	12	6 12	0 12	
8/14/2015	45	45	58	12	6 12	0 12	
8/15/2015	45	45	58	12	6 12	0 12	
8/16/2015	46	46	59	12	6 12	0 12	
8/17/2015	45	45	58	12	6 12	0 12	
8/18/2015	45	45	58	12	6 12	0 12	
8/19/2015	46	46	59	12	6 12	0 12	
8/20/2015	45	45	58	12	6 12	0 12	
8/21/2015	46	46	59	12	6 12	0 12	
8/22/2015	46	46	59	12	6 12	0 12	
8/23/2015	46	46	59	12	6 12	0 12	
8/24/2015	46	46	59	12	6 12	0 12	
8/25/2015	48	48	61	11	6 12	0 12	
8/26/2015	46	46	59	12	6 12	0 12	
8/27/2015	46	46	59	12	6 12	0 12	
8/28/2015	45	45	58	12	6 12	0 12	
8/29/2015	47	47	60	11	6 12	0 12	
8/30/2015	50	50	63	11	6 12	0 12	
8/31/2015	52	52	65	10	6 12	0 12	

Total

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