

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **AST**
 Deliverability

(See Instructions on Reverse Side)

Test Date:
9/7/2011

API No. 15
023-20554-0000

Company Rosewood Resources, Inc.		Lease Northrup		Well Number 2-33	
County Cheyenne	Location SWSE	Section 33	TWP 2S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7-15-2004		Plug Back Total Depth 1815'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1820'	Perforations 1600'	To 1634'
Tubing Size NONE ? 2 3/8"	Weight	Internal Diameter	Set at 1651'	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 .6	
Vertical Depth(H) 1634'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 9-6		20 11 at 11:40		(AM) (PM) Taken 9-7	
Well on Line: Started 9-7		20 11 at 11:50		(AM) (PM) Taken 9-8	
		20 11 at 1:40		(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 _m)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						211	225.4				
Flow						39	53.4			24	0

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
						23		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a 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: $\left[\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2} \right]$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG $\left[\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2} \right]$	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

Jarrell Grew

For Company

Checked by

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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 Northrup 2-33 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: 12/28/11

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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Northrup 2-33

West St. Francis

St. Francis

Pumping Unit/Elec

September-11

DATE	Tubir Casing					HRS	Water	REMARKS (Maximum length 110 characters)
	PSI	PSI	STATIC	MCF	SPM			
9/1/2011		36	49	16	4.5	24	18	
9/2/2011		37	50	16	4.5	24	17	
9/3/2011		37	50	16	4.5	24	16	
9/4/2011		37	50	16	4.5	24	15	
9/5/2011		37	50	16	4.5	24	16	
9/6/2011		35	48	16	4.5	12	17	shut well into do state test
9/7/2011		211	49	0	4.5	0	24	0 opened well didn't start pumping unit hp
9/8/2011		40	53	40	4.5	12	9	started PU and replaced stuffing box rubbers
9/9/2011		37	50	33	4.5	24	17	
9/10/2011		40	53	30	4.5	24	18	
9/11/2011		30	53	30	4.5	24	17	
9/12/2011		39	52	29	4.5	24	16	
9/13/2011		39	52	30	4.5	24	15	
9/14/2011		39	52	28	4.5	24	16	
9/15/2011		36	49	28	4.5	24	17	9/16 - 9.5 min bucket changed to 12hr cycle
9/16/2011		38	51	27	4.5	12	8	
9/17/2011		35	48	25	4.5	12	9	
9/18/2011		35	48	24	4.5	12	10	
9/19/2011		36	49	24	4.5	12	11	
9/20/2011		34	47	23	4.5	12	12	
9/21/2011		39	52	23	4.5	12	11	
9/22/2011		38	51	23	4.5	12	11	bucket test 8 min and greased
9/23/2011		37	50	22	4.5	12	12	
9/24/2011		36	49	22	4.5	12	11	
9/25/2011		36	49	22	4.5	12	10	
9/26/2011		37	50	21	4.5	12	11	
9/27/2011		39	52	21	4.5	12	11	bucket test 8 min
9/28/2011		40	53	21	4.5	12	10	
9/29/2011		38	51	21	4.5	12	11	
9/30/2011		36	49	20	4.5	12	11	
10/1/2011								

Total

683

383

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Northrup 2-33

West St. Francis

St. Francis

Pumping Unit/Elec

October-11

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)	
	PSI	PSI							
10/1/2011		37	49	19	4.5	12	0	10	
10/2/2011		36	49	20	4.5	12	0	11	
10/3/2011		37	49	20	4.5	12	0	10	
10/4/2011		37	49	20	4.5	12	0	9	
10/5/2011		36	49	20	4.5	12	0	10	
10/6/2011		38	52	20	4.5	12	0	9	bucket test 9.5 min
10/7/2011		41	51	19	4.5	12	0	8	
10/8/2011		41	50	18	4.5	12	0	9	
10/9/2011		37	50	19	4.5	12	0	10	
10/10/2011		37	50	19	4.5	12	0	9	
10/11/2011		36	73	19	4.5	12	0	8	
10/12/2011		36	55	19	4.5	12	0	10	bucket test 9 min
10/13/2011		38	49	19	4.5	12	0	9	
10/14/2011		36	50	18	4.5	12	0	9	
10/15/2011		36	49	17	4.5	12	0	11	
10/16/2011		37	50	18	4.5	12	0	12	
10/17/2011		36	50	18	4.5	12	0	11	
10/18/2011		39	50	18	4.5	12	0	10	
10/19/2011		38	51	18	4.5	12	0	9	
10/20/2011		38	49	18	4.5	12	0	10	bucket test 9 min
10/21/2011		39	49	18	4.5	12	0	9	
10/22/2011		39	49	17	4.5	12	0	10	
10/23/2011		37	49	18	4.5	12	0	11	
10/24/2011		37	49	18	4.5	12	0	10	
10/25/2011		37	49	18	4.5	12	0	10	bucket test 9 min
10/26/2011		36	50	18	4.5	12	0	11	
10/27/2011		36	50	19	4.5	12	0	12	
10/28/2011		36	49	17	4.5	12	0	9	
10/29/2011		36	48	16	4.5	12	0	10	
10/30/2011		35	48	17	4.5	12	0	12	
10/31/2011		33	48	18	4.5	12	0	10	

Total

570

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Northrup 2-33

West St. Francis

St. Francis

Pumping Unit/Elec

November-11

DATE	Tubing Casing				HRS	Water	REMARKS		
	PSI	PSI	STATIC MCF	SPM				CYCLE DOWN	BBLs
11/1/2011		49	62	17	4.5	12	0	8	
11/2/2011		47	49	18	4.5	12	0	9	
11/3/2011		33	47	17	4.5	12	0	10	bucket test 9 min
11/4/2011		34	46	17	4.5	12	0	9	
11/5/2011		34	47	16	4.5	12	0	8	
11/6/2011		35	47	17	4.5	12	0	11	
11/7/2011		34	48	17	4.5	12	0	10	
11/8/2011		34	54	17	4.5	12	0	9	
11/9/2011		34	48	17	4.5	12	0	10	bucket test 9 min
11/10/2011		33	47	17	4.5	12	0	11	
11/11/2011		33	46	17	4.5	12	0	10	
11/12/2011		33	46	16	4.5	12	0	8	
11/13/2011		33	46	17	4.5	12	0	12	
11/14/2011		34	46	17	4.5	12	0	10	
11/15/2011		35	52	17	4.5	12	0	9	
11/16/2011		33	49	17	4.5	12	0	10	
11/17/2011		33	46	16	4.5	12	0	10	bucket test 9 min
11/18/2011		32	46	16	4.5	12	0	10	
11/19/2011		39	46	15	4.5	12	0	9	
11/20/2011		39	47	17	4.5	12	0	8	
11/21/2011		34	47	16	4.5	12	0	9	
11/22/2011		35	47	16	4.5	12	0	10	bucket test 9 min
11/23/2011		35	48	17	4.5	12	0	9	
11/24/2011		34	48	17	4.5	12	0	8	
11/25/2011		34	48	16	4.5	12	0	9	
11/26/2011		33	48	15	4.5	12	0	10	
11/27/2011		34	47	16	4.5	12	0	9	
11/28/2011		35	47	16	4.5	12	0	8	
11/29/2011		35	47	17	4.5	12	0	9	
11/30/2011		35	47	17	4.5	12	0	10	
12/1/2011		0	0	0	0	0	0	0	

Total

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