

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow **AST**
 Deliverability

Test Date:
6/22/14

API No. 15
023-20627-0000

Company Rosewood Resources, Inc.			Lease Isernhagen		Well Number 21-26
County Cheyenne	Location NENW/4	Section 26	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field St. Francis		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 10/22/2005		Plug Back Total Depth 1513'		Packer Set at	
Casing Size 2 7/8"	Weight 6.5#	Internal Diameter 2.441	Set at 1513'	Perforations 1381'	To 1413'
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? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	Gas Gravity - G _g .6
Vertical Depth(H) 1413'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in		6-7	20 14	at 11:20	(AM) (PM) Taken 6-19
Well on Line: Started		6-22	20 14	at 11:30	(AM) (PM) Taken 6-23

OBSERVED SURFACE DATA

Duration of Shut-in 360 Hours

Static / Dynamic Property	Orifice Size (Inches)	Circle one: Meter 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 _o)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _o)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						188	202.4				
Flow						60	74.4			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 _{tt}	Deviation Factor F _{pv}	Metered Flow R (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
						12		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_a)² = 0.207
(P_c)² = _____

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

(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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog (Mcf/d)

Open Flow Mcf/d @ 14.65 psia Deliverability Mcf/d @ 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 12 day of December, 20 14.

Received
KANSAS CORPORATION COMMISSION

Small Martiny
For Company

Witness (if any)

FEB 25 2015

For Commission

Checked by

CONSERVATION DIVISION
WICHITA, KS

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 Isernhagen 21-26 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: 12/12/14

Received
KANSAS CORPORATION COMMISSION
FEB 25 2015
CONSERVATION DIVISION
WICHITA, KS

Signature: *James Marteny*
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.

W360

Isernhagen 21-26

St. Francis

St. Francis

None

June-1~~3~~4

DATE	Casing		MCF	HRS		REMARKS (Maximum length 110 characters)
	PSI	STATIC		DOWN		
6/1/2013	59	72		13	0	
6/2/2013	64	77		10	0	
6/3/2013	67	80		11	0	
6/4/2013	86	99		11	0	
6/5/2013	55	68		12	0	
6/6/2013	55	68		13	0	
6/7/2013	100	113		8	9	
6/8/2013	103	116		8	24	
6/9/2013	106	119		0	24	
6/10/2013	111	124		0	24	
6/11/2013	111	124		0	24	
6/12/2013	116	129		0	24	
6/13/2013	123	136		0	24	
6/14/2013	124	137		0	24	
6/15/2013	125	138		0	24	
6/16/2013	127	140		0	24	
6/17/2013	127	140		0	24	
6/18/2013	187	200		0	24	
6/19/2013	188	201		0	24	
6/20/2013	188	201		0	24	
6/21/2013	188	201		0	24	
6/22/2013	188	201		0	24	
6/23/2013	126	139		18	5	
6/24/2013	118	131		14	0	
6/25/2013	109	122		13	0	
6/26/2013	96	106		13	0	
6/27/2013	88	101		12	0	
6/28/2013	60	73		12	0	
6/29/2013	58	71		12	0	
6/30/2013	61	74		12	0	
7/1/2013					0	

Total

192

Received
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FEB 25 2015

CONSERVATION DIVISION
WICHITA, KS

W360
 Isernhagen 21-26
 St. Francis
 St. Francis
 None
 July-14

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2014	60	73		12	0	
7/2/2014	59	72		12	0	
7/3/2014	59	72		12	0	
7/4/2014	59	72		12	0	
7/5/2014	61	74		12	0	
7/6/2014	61	74		12	0	
7/7/2014	76	89		11	0	
7/8/2014	63	76		10	0	
7/9/2014	62	75		11	0	
7/10/2014	64	77		11	0	
7/11/2014	64	77		10	0	
7/12/2014	65	78		10	0	
7/13/2014	66	79		10	0	
7/14/2014	71	84		10	0	
7/15/2014	56	69		12	0	
7/16/2014	56	69		12	0	
7/17/2014	61	74		12	0	
7/18/2014	60	73		12	0	
7/19/2014	60	73		12	0	
7/20/2014	61	74		12	0	
7/21/2014	86	99		12	0	
7/22/2014	180	193		7	22	
7/23/2014	90	103		9	7	
7/24/2014	66	79		11	3	
7/25/2014	58	71		9	4	
7/26/2014	55	68		13	0	
7/27/2014	56	69		12	0	
7/28/2014	58	71		12	0	
7/29/2014	63	76		11	0	
7/30/2014	57	71		15	0	
7/31/2014	59	72		11	0	

Total

349

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FEB 25 2015
 CONSERVATION DIVISION
 WICHITA, KS

W360
 Isernhagen 21-26
 St. Francis
 St. Francis
 None
 August-14

DATE	Casing		MCF	HRS		REMARKS (Maximum length 110 characters)
	PSI	STATIC		DOWN		
8/1/2014	57	70		11	0	
8/2/2014	57	70		11	0	
8/3/2014	56	69		12	0	
8/4/2014	57	70		12	0	
8/5/2014	57	70		12	0	
8/6/2014	57	70		12	0	
8/7/2014	58	71		12	0	
8/8/2014	60	73		11	0	
8/9/2014	61	74		11	0	
8/10/2014	63	76		10	0	
8/11/2014	58	71		10	0	
8/12/2014	57	70		11	0	
8/13/2014	57	70		11	0	
8/14/2014	56	69		11	0	
8/15/2014	53	76		7	3	
8/16/2014	61	74		7	0	
8/17/2014	61	74		7	0	
8/18/2014	61	74		10	0	
8/19/2014	66	79		10	2	
8/20/2014	66	79		10	0	
8/21/2014	60	73		11	0	
8/22/2014	67	80		12	0	
8/23/2014	57	70		12	0	
8/24/2014	59	72		11	0	
8/25/2014	73	86		10	0	
8/26/2014	60	73		11	0	
8/27/2014	63	76		10	0	
8/28/2014	57	70		12	0	
8/29/2014	56	69		7	5	
8/30/2014	56	69		12	0	
8/31/2014	79	82		12	0	

Total 328

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FEB 25 2015
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 WICHITA, KS