

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

RECEIVED

SEP 18 2009

KCC WICHITA

Type Test:

- Open Flow  **OSI**  
 Deliverability

Test Date:  
5/19/2008

API No. 15  
023-20793-0100

Company Rosewood Resources, Inc.		Lease Zweygardt		Well Number 34-19H	
County Cheyenne	Location SWSE	Section 19	TWP 3S	RNG (E/W) 40W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7/30/2007		Plug Back Total Depth 4241'		Packer Set at	
Casing Size 7"	Weight 23#	Internal Diameter 6.366	Set at 1622'	Perforations 1622' MD	To 424' MD Open Hole
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations Open Hole	To
Type Completion (Describe) Single (Horizontal)		Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? Yes / <input checked="" type="checkbox"/> No	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1338'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 5-19 20 08 at 8:45 (AM) (PM) Taken 5-20 20 08 at 9:15 (AM) (PM)		Well on Line: Started 5-20 20 08 at 9:15 (AM) (PM) Taken 5-21 20 08 at 9:30 (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>c</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						150	164.4				
Flow						150	164.4			24	0

**FLOW STREAM ATTRIBUTES**

Plate Coefficient (F <sub>s</sub> ) (F <sub>d</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>
						83		

**(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>a</sub>)<sup>2</sup> = 0.207 : (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>a</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>a</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: $\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	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 10 day of December, 20 08.

\_\_\_\_\_  
Witness (if any)

*Annali Gervid*  
\_\_\_\_\_  
For Company

\_\_\_\_\_  
For Commission

\_\_\_\_\_  
Checked by

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 Zweygardt 34-19H 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: 12/10/08

RECEIVED  
SEP 18 2009  
KCC WICHITA

Signature: Dannell Grew  
Title: Production Foreman 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.

W2410  
 Zweygardt 34-19H  
 St. Francis  
 St. Francis  
 Flow  
 May-08

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
5/1/2008		80		78	0	
5/2/2008		80		79	0	
5/3/2008	140	79		79	0	
5/4/2008		79		79	0	
5/5/2008		79		79	0	
5/6/2008		79		78	0	
5/7/2008		79		78	0	
5/8/2008		78		77	0	
5/9/2008		78		79	0	
5/10/2008		77		78	0	
5/11/2008		78		79	0	
5/12/2008	140	77		78	0	
5/13/2008		77		78	0	
5/14/2008		78		79	0	
5/15/2008		77		78	0	
5/16/2008		77		78	0	
5/17/2008		76		53	0	
5/18/2008		77		72	0	
5/19/2008		76		78	0	
5/20/2008	150	77		78	0	shut in for test
5/21/2008	220	68		17	0	open
5/22/2008		72		88	0	
5/23/2008		81		87	0	
5/24/2008		81		88	0	
5/25/2008		73		80	0	
5/26/2008		73		80	0	
5/27/2008		77		82	0	
5/28/2008		76		85	0	
5/29/2008	150	82		85	0	
5/30/2008		81		85	0	
5/31/2008		78		83	0	

Total

2395

RECEIVED  
 SEP 18 2009  
 KCC WICHITA

RECEIVED  
 KANSAS CORPORATION COMMISSION

JAN 29 2009

CONSERVATION DIVISION  
 WICHITA, KS

W2410  
 Zwegardt 34-19H  
 St. Francis  
 St. Francis  
 Flow  
 June-08

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
6/1/2008		78		83	0	
6/2/2008		77		83	0	
6/3/2008	150	77		83	0	
6/4/2008		75		84	0	
6/5/2008		74		84	0	
6/6/2008		74		86	0	
6/7/2008		75		85	0	
6/8/2008		75		83	0	
6/9/2008		76		83	0	
6/10/2008	150	78		82	0	
6/11/2008		78		81	0	
6/12/2008		80		79	0	
6/13/2008		82		79	0	
6/14/2008		80		79	0	
6/15/2008		84		77	0	
6/16/2008		78		79	0	
6/17/2008	150	81		80	0	
6/18/2008		78		80	0	
6/19/2008		78		80	0	
6/20/2008		77		81	0	
6/21/2008		78		81	0	
6/22/2008		78		81	0	
6/23/2008		80		81	0	
6/24/2008	150	77		80	0	
6/25/2008		80		80	0	
6/26/2008		83		80	0	
6/27/2008		76		60	0	
6/28/2008		72		60	0	
6/29/2008		73		64	0	
6/30/2008		73		64	0	
7/1/2008					0	

Total

2362

RECEIVED

SEP 18 2009

KCC WICHITA

RECEIVED  
 KANSAS CORPORATION COMMISSION

JAN 29 2009

CONSERVATION DIVISION  
 WICHITA, KS

W2410  
 Zwegardt 34-19H  
 St. Francis  
 St. Francis  
 Flow  
 July-08

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2008		75		77	0	
7/2/2008		80		77	0	
7/3/2008		75		78	0	
7/4/2008		75		78	0	
7/5/2008		83		78	0	
7/6/2008	150	85		75	0	
7/7/2008		83		75	0	
7/8/2008		79		76	0	
7/9/2008		77		79	0	
7/10/2008		78		79	0	
7/11/2008		83		79	0	
7/12/2008		77		75	0	
7/13/2008	150	73		78	0	
7/14/2008		83		80	11	
7/15/2008		80		8	0	
7/16/2008		83		0	0	
7/17/2008		78		4	0	
7/18/2008		97		47	0	
7/19/2008		63		8	3	
7/20/2008		67		37	0	
7/21/2008	150	67		28	0	
7/22/2008		76		47	0	
7/23/2008		73		18	0	pinched in to work on
7/24/2008		95		0	0	
7/25/2008		92		0	0	
7/26/2008		65		20	0	
7/27/2008		61		29	0	
7/28/2008		71		28	0	
7/29/2008		62		27	0	
7/30/2008		136		27	0	
7/31/2008	150	67		26	5	

Total 1438

RECEIVED  
 SEP 18 2009  
 KCC WICHITA

RECEIVED  
 KANSAS CORPORATION COMMISSION

JAN 29 2009

CONSERVATION DIVISION  
 WICHITA, KS