

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

Type Test:

- Open Flow **ASI**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
7/19/2012

API No. 15  
023-21266-0000

Company Rosewood Resources, Inc.		Lease Zweygartd		Well Number 41-19	
County Cheyenne	Location NENE	Section 19	TWP 3S	RNG (E/W) 40W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 9/30/2010		Plug Back Total Depth 1466'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 6.366	Set at 1505'	Perforations 1308'	To 1338'
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 type="checkbox"/> No <input checked="" type="checkbox"/>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1515'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 7-18 20 12 at 6:25 (AM) (PM) Taken 7-19 20 12 at 6:45 (AM) (PM)		Well on Line: Started 7-19 20 12 at 6:45 (AM) (PM) Taken 7-20 20 12 at 6:55 (AM) (PM)			

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### OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (P <sub>m</sub> )	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						203	217.4				
Flow						72	86.4			24	

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>d</sub> ) (F <sub>p</sub> ) Mctd	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 (Mctd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						9		

### (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: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mctd)

Open Flow Mctd @ 14.65 psia Deliverability Mctd @ 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 19 day of December, 20 12

\_\_\_\_\_  
Witness (if any)  
\_\_\_\_\_  
For Commission

*Januel Gevea*  
\_\_\_\_\_  
For Company

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

## 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 Zweygardt 41-19 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: 12/19/12

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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W2750

Zweygardt 41-19

St. Francis

St. Francis

Flow

July-12

FloBoss

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE DOWN	HRS	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI						
7/1/2012		64	87	9				
7/2/2012		65	79	9		3		
7/3/2012		80	93	6				
7/4/2012		64	77	9				
7/5/2012		63	76	9				
7/6/2012		91	104	9		1		
7/7/2012		66	79	9				
7/8/2012		70	83	9				
7/9/2012		68	81	9				
7/10/2012		67	80	8				
7/11/2012		64	78	8				
7/12/2012		69	82	8				
7/13/2012		65	78	8				
7/14/2012		65	78	9				
7/15/2012		65	78	9				
7/16/2012		79	92	7		1.5		
7/17/2012		67	80	8				
7/18/2012		70	83	8				cp 64 si for state test
7/19/2012		203	166	0		24		cp 203 opened
7/20/2012		72	85	16		0.5		
7/21/2012		73	86	10				
7/22/2012		68	81	10				
7/23/2012		75	88	10		0.5		
7/24/2012		76	89	8				
7/25/2012		77	90	4				
7/26/2012		71	84	7				
7/27/2012		88	101	5		5		
7/28/2012		74	87	1				
7/29/2012		65	78	9				
7/30/2012		63	76	9				
7/31/2012		63	76	9				

Total

249

0

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W2750  
Zweygardt 41-19  
St. Francis  
St. Francis  
Flow  
August-12  
FloBoss

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2012		73	86	9				
8/2/2012		66	79	7				
8/3/2012		66	79	7				
8/4/2012		63	76	7				
8/5/2012		74	87	7				
8/6/2012		64	77	7				
8/7/2012		69	82	7				
8/8/2012		67	80	6				
8/9/2012		66	79	6				
8/10/2012		80	93	7				
8/11/2012		67	80	3		1.5		
8/12/2012		63	76	8				
8/13/2012		63	76	6				
8/14/2012		65	78	8				
8/15/2012		76	89	8				
8/16/2012		64	77	6				
8/17/2012		66	79	6				
8/18/2012		67	80	6				
8/19/2012		69	82	5				
8/20/2012		62	75	7				
8/21/2012		71	84	6				
8/22/2012		66	79	8				
8/23/2012		69	82	7				
8/24/2012		67	80	3				
8/25/2012		68	81	1				
8/26/2012		64	77	6				
8/27/2012		65	78	6				
8/28/2012		64	77	7				
8/29/2012		67	80	6				
8/30/2012		65	78	6				
8/31/2012		65	78	6				

Total

195

0

W2750

Zweygardt 41-19

St. Francis

St. Francis

Flow

September-12

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DATE	Tubing PSI	Casing PSI	STATIC MCF	SPM	CYCLE DOWN	HRS	Water BBLs	REMARKS (Maximum length 110 characters)
9/1/2012		65	78	6				
9/2/2012		69	82	6				
9/3/2012		65	78	6				
9/4/2012		64	77	6			1	
9/5/2012		80	93	3				
9/6/2012		80	93	3				
9/7/2012		161	174	2			19	
9/8/2012		171	184	2			24	
9/9/2012		177	190	0			24	
9/10/2012		181	194	0			24	
9/11/2012		182	195	0			24	
9/12/2012		184	197	0			24	
9/13/2012		120	133	15			10	
9/14/2012		109	122	13				
9/15/2012		101	114	9				
9/16/2012		95	108	5				
9/17/2012		88	101	5				
9/18/2012		70	83	8				
9/19/2012		93	106	4				
9/20/2012		67	80	12				
9/21/2012		66	79	12				
9/22/2012		65	78	11				
9/23/2012		65	78	10				
9/24/2012		66	79	11				
9/25/2012		70	83	9				
9/26/2012		70	83	9				
9/27/2012		77	90	9				
9/28/2012		69	82	9				
9/29/2012		70	83	9				
9/30/2012		69	82	9				
10/1/2012								

Total

203

0