

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

- Open Flow **RFST**
 Deliverability

Test Date:
6/22/14

API No. 15
023-21257-0000

Company Rosewood Resources, Inc.		Lease Zweygardt		Well Number 22-19	
County Cheyenne	Location SENW	Section 19	TWP 3S	RNG (E/W) 40W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 11/11/10		Plug Back Total Depth 1475'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 6.366	Set at 1513'	Perforations 1296'	To 1326'
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="radio"/> No <input type="radio"/>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1525'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-7 20 14 at 5:00 (AM) (PM) Taken 6-14 20 14 at 5:15 (AM) (PM)		Well on Line: Started 6-22 20 14 at 5:15 (AM) (PM) Taken 6-23 20 14 at 5:30 (AM) (PM)			

OBSERVED SURFACE DATA

Duration of Shut-in 360 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 ₁) or (P _c)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						230	244.4				
Flow						80	94.4			360	

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _s) (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 (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
						32		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_a)² = 0.207
(P_o)² = _____

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

(P _c) ² - (P _a) ² or (P _c) ² - (P _o) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _o 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" ----- or ----- 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.

Witness (if any)

Received
KANSAS CORPORATION COMMISSION

For Company

For Commission

FEB 25 2015

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 Zweygardt 22-19 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: 12/12/14

Received
KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
WICHITA, KS

Signature: *Janell Martusey*

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.

W2739

Zweygardt 22-19-1

St. Francis

St. Francis

Flow

June-184

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2013	83	96		35	0
6/2/2013	89	102		34	0
6/3/2013	84	97		35	0
6/4/2013	96	109		33	0
6/5/2013	79	92		36	0
6/6/2013	80	92		34	0
6/7/2013	175	188		21	9
6/8/2013	188	201		0	24
6/9/2013	201	214		0	24
6/10/2013	213	226		0	24
6/11/2013	222	235		0	24
6/12/2013	227	240		0	24
6/13/2013	228	241		0	24
6/14/2013	230	243		0	24
6/15/2013	230	243		0	24
6/16/2013	231	244		0	24
6/17/2013	231	244		0	24
6/18/2013	230	243		0	24
6/19/2013	226	239		0	24
6/20/2013	223	236		0	24
6/21/2013	221	234		0	24
6/22/2013	221	234		0	24
6/23/2013	151	164		38	5
6/24/2013	146	159		53	0
6/25/2013	138	151		53	0
6/26/2013	119	132		48	0
6/27/2013	113	126		48	0
6/28/2013	94	107		42	0
6/29/2013	89	102		39	0
6/30/2013	90	103		38	0
7/1/2013					0

Total

587

Received
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FEB 25 2015

CONSERVATION DIVISION
WICHITA, KS

W2739

Zweygardt 22-19

St. Francis

St. Francis

Flow

July-14

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
7/1/2014	87	100		38	0
7/2/2014	87	100		37	0
7/3/2014	87	100		36	0
7/4/2014	87	100		36	0
7/5/2014	87	100		36	0
7/6/2014	87	100		35	0
7/7/2014	96	109		34	0
7/8/2014	86	99		36	0
7/9/2014	87	100		35	0
7/10/2014	87	100		35	0
7/11/2014	91	104		35	0
7/12/2014	87	100		35	0
7/13/2014	87	100		34	0
7/14/2014	88	101		34	0
7/15/2014	80	93		34	0
7/16/2014	82	95		34	0
7/17/2014	83	96		34	0
7/18/2014	83	96		33	0
7/19/2014	81	94		33	0
7/20/2014	82	95		33	0
7/21/2014	143	156		33	0
7/22/2014	151	164		8	22
7/23/2014	106	119		33	7
7/24/2014	79	92		36	3
7/25/2014	81	94		33	4
7/26/2014	79	92		33	0
7/27/2014	80	93		33	0
7/28/2014	79	92		32	0
7/29/2014	81	94		32	0
7/30/2014	80	93		32	0
7/31/2014	83	96		32	0

Total

1034

Received
KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
WICHITA, KS

W2739

Zweygart 22-19

St. Francis

St. Francis

Flow

August-14

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
8/1/2014	80	93		32	0
8/2/2014	79	92		32	0
8/3/2014	79	92		32	0
8/4/2014	79	92		32	0
8/5/2014	79	92		32	0
8/6/2014	80	93		31	0
8/7/2014	80	93		31	0
8/8/2014	94	81		31	0
8/9/2014	82	95		32	0
8/10/2014	82	95		31	0
8/11/2014	86	99		31	0
8/12/2014	78	91		31	0
8/13/2014	79	92		31	0
8/14/2014	78	91		31	0
8/15/2014	84	97		31	3
8/16/2014	81	94		31	0
8/17/2014	82	95		31	0
8/18/2014	81	94		31	0
8/19/2014	86	99		31	2
8/20/2014	81	94		31	0
8/21/2014	79	92		31	0
8/22/2014	85	98		31	0
8/23/2014	76	89		31	0
8/24/2014	77	90		30	0
8/25/2014	91	104		30	0
8/26/2014	78	91		30	0
8/27/2014	84	97		30	0
8/28/2014	97	110		30	0
8/29/2014	76	89		29	5
8/30/2014	75	88		29	0
8/31/2014	83	96		29	0

Total

956

Received
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FEB 25 2015

CONSERVATION DIVISION
WICHITA, KS