

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

Open Flow **AS**
 Deliverability

Test Date:
6/22/14

API No. 15
023-20606-0000

Company Rosewood Resources, Inc.		Lease Miller		Well Number 2-13	
County Cheyenne	Location NW SW/4	Section 13	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7/1/2005		Plug Back Total Depth 1464'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1464'	Perforations 1270'	To 1302'
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? <input checked="" type="radio"/> No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1302'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-7 20 14 at 8:45 (AM)(PM) Taken 6-20 20 14 at 9:00 (AM)(PM)		Well on Line: Started 6-22 20 14 at 9:00 (AM)(PM) Taken 6-23 20 14 at 9:45 (AM)(PM)			

OBSERVED SURFACE DATA

Duration of Shut-in 360 Hours

Static / Dynamic Property	Orifice Size (Inches)	Circle one: Meter 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 _e)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _e)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						159	173.4				
Flow						50	64.4			360	

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _v) (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
						36		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

(P _c) ² - (P _w) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _d ² 2. P _c ² - P _w ² divided by: P _c ² - P _w ²	LOG of formula 1. or 2. and divide by: $\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$	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 12 day of December, 20 14.

Received
KANSAS CORPORATION COMMISSION

Janell Montney
For Company

Witness (if any)

FEB 25 2015

For Commission

CONSERVATION DIVISION
WICHITA, KS

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 Miller 2-13 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: 

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.

W358
 Miller 2-13
 St. Francis
 St. Francis
 None
 June-18⁴
 FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2013	51	64		34	0
6/2/2013	56	69		34	0
6/3/2013	49	62		36	0
6/4/2013	65	78		34	0 turn on pumping unit
6/5/2013	46	59		34	0
6/6/2013	48	61		32	0 turn off pumping unit
6/7/2013	141	154		19	9
6/8/2013	145	158		0	24
6/9/2013	148	161		0	24
6/10/2013	150	163		0	24
6/11/2013	151	164		0	24
6/12/2013	153	165		0	24
6/13/2013	154	167		0	24
6/14/2013	155	168		0	24
6/15/2013	156	169		0	24
6/16/2013	157	170		0	24
6/17/2013	157	170		0	24
6/18/2013	158	171		0	24
6/19/2013	158	171		0	24
6/20/2013	159	172		0	24
6/21/2013	159	172		0	24
6/22/2013	159	172		0	24
6/23/2013	117	130		49	5
6/24/2013	106	119		42	0
6/25/2013	101	114		32	0
6/26/2013	90	103		29	0
6/27/2013	81	94		28	0
6/28/2013	50	63		28	0
6/29/2013	50	63		26	0 started pumping unit
6/30/2013	51	64		31	0
7/1/2013					0

Total

488

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W358
 Miller 2-13
 St. Francis
 St. Francis
 None
 July-14
 FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2014	51	64		34	0	22
7/2/2014	51	64		36	0	23
7/3/2014	52	65		37	0	24
7/4/2014	52	65		37	0	23
7/5/2014	53	66		40	0	22
7/6/2014	53	66		40	0	23 3 min bt
7/7/2014	54	67		43	0	24
7/8/2014	53	67		43	0	23
7/9/2014	55	68		43	0	23
7/10/2014	56	69		43	0	22
7/11/2014	59	72		44	0	23
7/12/2014	58	71		44	0	24
7/13/2014	59	62		45	0	23
7/14/2014	61	74		45	0	22
7/15/2014	49	62		38	0	24
7/16/2014	51	64		42	0	23
7/17/2014	51	64		44	0	22
7/18/2014	52	65		42	0	23
7/19/2014	48	61		40	0	24
7/20/2014	50	63		40	0	23
7/21/2014	126	139		39	0	22
7/22/2014	133	146		2	22	24
7/23/2014	75	88		37	7	23
7/24/2014	57	70		36	3	12
7/25/2014	49	62		30	4	0 started pumping unit
7/26/2014	48	61		33	0	18
7/27/2014	49	62		35	0	23
7/28/2014	50	63		35	0	24
7/29/2014	49	62		35	0	22
7/30/2014	51	64		36	0	23
7/31/2014	51	64		36	0	22

Total

1174

673

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W358
 Miller 2-13
 St. Francis
 St. Francis
 None
 August-14
 FloBoss

DATE	Casing				CYCLE	HRS DOWN	Water		REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF	SPM			BBLS		
8/1/2014	51	64	36	6	8	0	3		
8/2/2014	50	63	36	6	8	0	3		
8/3/2014	50	63	36	6	8	0	3		
8/4/2014	50	63	36	6	8	0	3		
8/5/2014	51	64	36	6	8	0	3		
8/6/2014	51	64	39	6	8	0	3		
8/7/2014	52	65	36	6	8	0	3		
8/8/2014	53	66	36	6	8	0	3		
8/9/2014	55	68	36	6	8	0	3		
8/10/2014	55	68	36	6	8	0	3		
8/11/2014	56	69	36	6	8	0	3		
8/12/2014	50	63	36	6	8	0	3		
8/13/2014	51	64	36	6	8	0	3		
8/14/2014	50	63	36	6	8	0	3	5 min BT	
8/15/2014	56	69	34	6	8	3	3		
8/16/2014	55	68	36	6	8	0	3		
8/17/2014	56	69	36	6	8	0	3		
8/18/2014	56	69	36	6	8	0	3		
8/19/2014	64	77	34	6	8	2	3		
8/20/2014	54	67	34	6	8	0	3		
8/21/2014	53	66	36	6	8	0	3		
8/22/2014	64	77	36	6	8	0	3		
8/23/2014	49	62	36	6	8	0	3		
8/24/2014	49	62	36	6	8	0	3		
8/25/2014	51	64	35	6	8	0	3		
8/26/2014	53	66	35	6	8	0	3		
8/27/2014	55	68	35	6	8	0	3		
8/28/2014	110	123	35	6	8	0	1.5		
8/29/2014	48	61	29	6	8	5	1.5		
8/30/2014	49	62	34	6	8	0	3		
8/31/2014	63	76	34	6	8	0	3		

Total

1098

90

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS