

KANSAS CORPORATION COMMISSION

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **ASL**
 Deliverability

(See Instructions on Reverse Side)

Test Date:
6/22/14

API No. 15
15-023-20567-0000

Company Rosewood Resources		Lease Miller		Well Number 1-13	
County Cheyenne	Location NESW	Section 13	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field St. Francis		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 9-10-2004		Plug Back Total Depth 1457'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1500'	Perforations 1292'	To 1330'
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"/> Yes / No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1330'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-7		20 14 at 8:55		(AM) (PM) Taken 6-21	
Well on Line: Started 6-22		20 14 at 9:10		(AM) (PM) Taken 6-23	
		20 14 at 9:10		(AM) (PM)	
		20 14 at 9:55		(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 _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						158	172.4				
Flow						53	67.4			360	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 (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
						40		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_o)² = 0.207
(P_o)² = _____

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

(P _o) ² - (P _e) ² or (P _e) ² - (P _o) ²	(P _o) ² - (P _w) ²	Choose formula 1 or 2: 1. P _e ² - P _a ² 2. P _o ² - P _c ² divided by: P _c ² - P _w ²	LOG of formula 1. or 2. and divide by: $P_c^2 - P_w^2$	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

Arnold Matney
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 1-13 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.

W357
 Miller 01-13
 St. Francis
 St. Francis
 St. Francis
 June-184
 FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2013	51	64		36	0
6/2/2013	56	69		34	0
6/3/2013	50	63		34	0 turn on pumping unit
6/4/2013	66	79		36	0
6/5/2013	47	60		39	0
6/6/2013	48	61		39	0 turn off pumping unit
6/7/2013	136	149		23	9
6/8/2013	140	153		0	24
6/9/2013	143	156		0	24
6/10/2013	145	158		0	24
6/11/2013	146	159		0	24
6/12/2013	148	161		0	24
6/13/2013	149	162		0	24
6/14/2013	150	163		0	24
6/15/2013	151	164		0	24
6/16/2013	152	165		0	24
6/17/2013	153	166		0	24
6/18/2013	154	167		0	24
6/19/2013	154	167		0	24
6/20/2013	155	168		0	24
6/21/2013	158	171		0	24
6/22/2013	101	114		50	24
6/23/2013	118	131		54	5
6/24/2013	107	120		60	0
6/25/2013	101	114		50	0
6/26/2013	90	103		43	0
6/27/2013	81	94		40	0
6/28/2013	51	64		38	0
6/29/2013	50	63		36	0 started pumping unit
6/30/2013	52	65		39	0
7/1/2013					0

Total

651

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W357
 Miller 01-13
 St. Francis
 St. Francis
 St. Francis
 July-14
 FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2014	52	65		40	0	21
7/2/2014	52	65		40	0	22
7/3/2014	52	65		41	0	23
7/4/2014	52	65		41	0	22
7/5/2014	53	66		41	0	23
7/6/2014	53	66		41	0	22 4.5 min bt
7/7/2014	54	67		41	0	21
7/8/2014	54	67		41	0	22
7/9/2014	56	69		44	0	23
7/10/2014	56	69		41	0	21
7/11/2014	59	72		41	0	22
7/12/2014	57	70		41	0	23
7/13/2014	60	73		39	0	22
7/14/2014	61	74		39	0	21
7/15/2014	49	62		41	0	22
7/16/2014	51	64		41	0	23
7/17/2014	51	64		44	0	21
7/18/2014	52	65		41	0	23
7/19/2014	48	61		41	0	22
7/20/2014	50	63		41	0	21
7/21/2014	129	142		41	0	22
7/22/2014	136	149		13	22	23
7/23/2014	75	88		39	7	22
7/24/2014	57	70		39	3	18
7/25/2014	49	62		34	4	0 started pumping unit
7/26/2014	48	61		38	0	14
7/27/2014	49	62		39	0	21
7/28/2014	50	63		39	0	22
7/29/2014	49	62		39	0	23
7/30/2014	51	64		40	0	22
7/31/2014	51	64		40	0	21

Total

1221

648

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W357
 Miller 01-13
 St. Francis
 St. Francis
 St. Francis
 August-14
 FloBoss

DATE	Casing PSI	STATIC	MCF	SPM	CYCLE	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2014	51	64	40	6.5	16	0	23	
8/2/2014	50	63	40	6.5	16	0	23	
8/3/2014	51	64	40	6.5	16	0	23	
8/4/2014	50	63	40	6.5	16	0	23	
8/5/2014	52	65	40	6.5	16	0	21	
8/6/2014	53	66	40	6.5	16	0	23	
8/7/2014	53	66	40	6.5	16	0	23	
8/8/2014	53	66	40	6.5	16	0	23	
8/9/2014	55	68	40	6.5	16	0	21	4.5 min BT
8/10/2014	55	68	40	6.5	16	0	20	
8/11/2014	56	69	40	6.5	16	0	23	
8/12/2014	50	63	40	6.5	16	0	23	
8/13/2014	52	65	40	6.5	16	0	23	
8/14/2014	50	63	40	6.5	16	0	21	
8/15/2014	57	70	39	6.5	16	3	23	
8/16/2014	56	69	41	6.5	16	0	23	
8/17/2014	56	69	41	6.5	16	0	23	
8/18/2014	56	69	41	6.5	16	0	23	
8/19/2014	64	77	41	6.5	16	2	21	
8/20/2014	54	67	41	6.5	16	0	23	
8/21/2014	53	66	41	6.5	16	0	21	
8/22/2014	64	77	41	6.5	16	0	21	
8/23/2014	50	63	41	6.5	16	0	23	
8/24/2014	51	64	41	6.5	16	0	20	
8/25/2014	77	90	41	6.5	16	0	21	
8/26/2014	53	66	41	6.5	16	0	23	
8/27/2014	55	68	35	6.5	16	0	20	
8/28/2014	115	128	41	6.5	16	0	11.5	
8/29/2014	49	62	34	6.5	16	5	11.5	
8/30/2014	49	62	40	6.5	16	0	23	
8/31/2014	63	75	40	6.5	16	0	23	

Total

1240

667

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS