

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow Deliverability

Test Date:
7/11/2013

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 7-10 20 13 at 8:45		(AM)(PM) Taken 7-11 20 13 at 9:00		(AM)(PM)	
Well on Line: Started 7-11 20 13 at 9:00		(AM)(PM) Taken 7-12 20 13 at 9:45		(AM)(PM)	

OBSERVED SURFACE DATA

Duration of Shut-in 24 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 _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						128	142.4				
Flow						54	68.4			24	

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 (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
						31		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_a)² = 0.207
(P_d)² = _____

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

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²	LOG of formula 1. or 2. and divide by: $\left[\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2} \right]$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG $\left[\right]$	Antilog	Open Flow Deliverability Equals R x Antilog (Mcf/d)

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 21 day of November, 20 13.

KANSAS CORPORATION COMMISSION

Witness (if any)

DEC 26 2013

Janell Mathney
For Company

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: 11/21/13

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CONSERVATION DIVISION
WICHITA, KS

Signature: _____

Samuel Martinez

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
 July-13
 FloBoss

DATE	Casing PSI	STATIC	MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2013	51	64	25	6	13	19	
7/2/2013	53	66	24	6	13	20	
7/3/2013	51	64	26	6	13	18	5.25 min bt
7/4/2013	55	68	28	6	13	16	
7/5/2013	55	68	27	6	13	17	
7/6/2013	54	67	29	6	13	18	
7/7/2013	67	80	31	6	13	19	
7/8/2013	64	77	31	6	13	20	
7/9/2013	62	75	31	6	13	21	
7/10/2013	61	61	32	6	13	20	si for state test - cp 61
7/11/2013	128	77	0	6	13	24	21 reopened - cp 128
7/12/2013	70	83	40	6	6	9	shut pumping unit off hfp
7/13/2013	72	85	35	6	0	2.5	0
7/14/2013	75	88	29	6	0	0	0
7/15/2013	55	68	28	6	6	9	restart pu
7/16/2013	52	65	30	6	13	20	treated well 5 min bt grease19d
7/17/2013	48	61	31	6	13	21	
7/18/2013	79	92	31	6	6	9	pu off hfp
7/19/2013	70	83	31	6	0	0	0
7/20/2013	72	85	27	6	0	0	0
7/21/2013	73	86	26	6	0	0	0
7/22/2013	68	81	26	6	0	0	0
7/23/2013	66	79	25	6	6	9	restart pu
7/24/2013	73	86	27	6	13	21	
7/25/2013	76	89	30	6	6	9	pu off hfp
7/26/2013	64	77	27	6	6	10	restart pu
7/27/2013	52	65	29	6	13	20	
7/28/2013	54	67	31	6	13	21	
7/29/2013	52	65	31	6	13	20	
7/30/2013	94	107	32	6	6	3.5	9 pu off hfp
7/31/2013	112	125	25	6	0	5.5	0

Total

875

396

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 WICHITA, KS

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

DATE	Casing PSI	STATIC MCF	SPM	HRS CYCLEDOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2013	74	87	28	6		
8/2/2013	75	88	25	6		
8/3/2013	70	83	25	6		
8/4/2013	72	85	23	6		
8/5/2013	62	75	23	6		
8/6/2013	51	64	23	6	7	10 restart pu
8/7/2013	47	60	25	6	13	20
8/8/2013	51	64	27	6	13	21
8/9/2013	54	67	28	6	13	21
8/10/2013	52	65	28	6	13	20
8/11/2013	49	62	30	6	13	19
8/12/2013	49	62	30	6	13	20
8/13/2013	49	62	31	6	13	21
8/14/2013	50	63	32	6	13	22
8/15/2013	50	63	32	6	13	0.5 18 5.25 min bt greased
8/16/2013	61	74	32	6	13	16
8/17/2013	61	74	33	6	13	18
8/18/2013	62	75	33	6	13	19
8/19/2013	64	77	33	6	6	1.5 8
8/20/2013	87	100	31	6	0	1 0
8/21/2013	83	96	27	6	0	0
8/22/2013	86	99	26	6	0	5 0
8/23/2013	69	82	26	6	0	0
8/24/2013	80	93	25	6	0	1 0
8/25/2013	85	98	25	6	0	1 0
8/26/2013	51	64	24	6	6	8 started pumping unit
8/27/2013	48	61	25	6	13	18
8/28/2013	47	60	27	6	13	19
8/29/2013	89	102	27	6	6	8 pu off hfp
8/30/2013	84	97	26	6	0	0
8/31/2013	84	97	24	6	0	0

Total

854

306

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 CONSERVATION DIVISION
 WICHITA, KS

W358
 Miller 2-13
 St. Francis
 St. Francis
 None
 September-13
 FloBoss

DATE	Casing PSI	STATIC MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
9/1/2013	107	120	20		1	
9/2/2013	90	103	28			
9/3/2013	127	140	24		22	
9/4/2013	131	144	1		10	
9/5/2013	114	127	14			
9/6/2013	86	99	30		1	
9/7/2013	92	105	24			
9/8/2013	90	103	22			
9/9/2013	92	105	22			
9/10/2013	96	109	21		2	
9/11/2013	123	136	21			
9/12/2013	133	146	5		18	
9/13/2013	86	99	24		4	
9/14/2013	71	84	22		2	
9/15/2013	81	94	21			
9/16/2013	61	74	21			
9/17/2013	51	64	20			
9/18/2013	48	61	20	6	6	9 restart pu
9/19/2013	44	57	23	6	13	18
9/20/2013	32	45	25	6	13	17
9/21/2013	35	48	26	6	13	16
9/22/2013	59	72	26	6	13	17
9/23/2013	62	75	27	6	13	18
9/24/2013	53	66	27	6	6	4 9 pu off hfp
9/25/2013	84	97	24	6	0	0
9/26/2013	70	83	23	6	0	0
9/27/2013	49	62	22	6	6	9 restart pu treated well
9/28/2013	53	66	24	6	13	18
9/29/2013	53	66	26	6	13	16
9/30/2013	58	71	26	6	13	18
10/1/2013						

Total

659

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