

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **AFI**
 Deliverability

(See Instructions on Reverse Side)

Test Date:
6/22/14

API No. 15
023-20683-0000

Company Rosewood Resources, Inc.		Lease Ella Mae		Well Number 32-04	
County Cheyenne	Location SWNE	Section 4	TWP 3S	RNG (E/W) 42W	Acres Attributed
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 2/14/2007		Plug Back Total Depth 1867'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter	Set at 1867'	Perforations 1604'	To 1632'
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 <input type="radio"/> No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1874'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in		6-7	20 14	at 1:10	(AM) (PM) Taken 6-18
Well on Line: Started		6-22	20 14	at 1:25	(AM) (PM) Taken 6-23
				20 14	at 2:10 (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						138	152.4				
Flow						45	59.4			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 _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
						9		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_s)² = 0.207
(P_a)² = _____

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

(P _c) ² - (P _s) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _s 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: $\left[\frac{P_c^2 - P_w^2}{P_c^2 - P_s^2} \right]$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG $\left[\right]$	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 10 day of December, 20 14.

Received
KANSAS CORPORATION COMMISSION

Samuel 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 Ella Mae 32-04 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: 12/10/14

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KANSAS CORPORATION COMMISSION
FEB 25 2015
CONSERVATION DIVISION
WICHITA, KS

Signature: *Janell Martney*
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.

W2425
 Ella Mae 32-04
 West St. Francis
 St. Francis
 None
 June-14

DATE	Casing		MCF	SPM	HRS		Water BBLs
	PSI	STATIC			CYCLE	DOWN	
6/1/2014	51	64	9	7	12	0	21
6/2/2014	66	79	8	7	12	0	22
6/3/2014	56	69	9	7	12	0	21
6/4/2014	82	95	8	7	12	0	20
6/5/2014	42	55	7	7	12	0	21
6/6/2014	45	58	6	7	0	0	0
6/7/2014	123	136	0	7	0	9	0
6/8/2014	126	139	0		0	24	0
6/9/2014	129	142	0		0	24	0
6/10/2014	136	149	0		0	24	0
6/11/2014	137	150	0			24	
6/12/2014	140	153	0			24	
6/13/2014	141	154	0			24	
6/14/2014	135	148	0			24	
6/15/2014	136	149	0			24	
6/16/2014	137	150	0			24	
6/17/2014	137	150	0			24	
6/18/2014	138	151	0			24	
6/19/2014	138	151	0			24	
6/20/2014	138	151	0			24	
6/21/2014	138	151	0			24	
6/22/2014	138	151	0			24	
6/23/2014	114	127	0			5	
6/24/2014	109	122	0			0	
6/25/2014	96	109	4			0	
6/26/2014	87	100	7			0	
6/27/2014	79	92	7			0	
6/28/2014	48	61	6			0	
6/29/2014	47	60	5			0	
6/30/2014	46	59	5			0	
7/1/2014						0	

Total 81 105

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 WICHITA, KS

W2425
 Ella Mae 32-04
 West St. Francis
 St. Francis
 None
 July-14

DATE	Casing			SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF				
7/1/2014	47	60	5	7	12	0	20
7/2/2014	47	60	5	7	12	0	21 changed battery and diode
7/3/2014	47	60	0	7	12	0	22
7/4/2014	47	60	5	7	12	0	21
7/5/2014	50	63	5	7	12	0	20
7/6/2014	50	63	5	7	12	0	21
7/7/2014	63	76	6	7	12	0	22
7/8/2014	51	64	7	7	12	0	21
7/9/2014	51	64	7	7	12	0	20
7/10/2014	52	65	7	7	12	0	21
7/11/2014	54	67	8	7	12	0	22
7/12/2014	54	67	8	7	12	0	21
7/13/2014	55	68	8	7	12	0	20
7/14/2014	84	97	8	7	12	0	21
7/15/2014	45	58	8	7	12	0	22
7/16/2014	45	58	8	7	12	0	21
7/17/2014	46	59	8	7	12	0	20
7/18/2014	46	59	8	7	12	0	20 pu off, disposal down
7/19/2014	44	57	3	7	12	0	0
7/20/2014	44	57	3	7	12	0	20 turn on pu
7/21/2014	116	129	3	7	6	0	10 pu off, hfp
7/22/2014	139	152	3	7	0	22	0
7/23/2014	76	89	1	7	0	7	0
7/24/2014	54	67	0	7	0	3	0
7/25/2014	42	55	7	7	6	4	0 started pumping unit
7/26/2014	43	56	7	7	12	0	20
7/27/2014	43	56	8	7	12	0	19
7/28/2014	38	51	7	7	12	0	18
7/29/2014	32	45	8	7	12	0	19
7/30/2014	31	44	8	7	12	0	20
7/31/2014	31	44	8	7	12	0	21

Total

182

523

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W2425
 Ella Mae 32-04
 West St. Francis
 St. Francis
 None
 August-14

DATE	Casing PSI	STATIC	MCF	SPM	CYCLE	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2014	31	44		8	7	12	0	20
8/2/2014	31	44		8	7	12	0	19
8/3/2014	30	43		9	7	12	0	20
8/4/2014	47	60		9	7	12	0	19
8/5/2014	47	60		9	7	12	0	18
8/6/2014	48	61		9	7	12	0	19
8/7/2014	49	62		9	7	12	0	20
8/8/2014	50	63		9	7	12	0	19
8/9/2014	50	63		9	7	12	0	18
8/10/2014	52	65		9	7	12	0	17
8/11/2014	48	61		9	7	12	0	18
8/12/2014	39	52		9	7	12	0	19
8/13/2014	30	43		9	7	12	0	20 tighten packing and changed check valve
8/14/2014	29	42		9	7	12	0	19
8/15/2014	45	58		9	7	12	3	13
8/16/2014	28	41		8	7	12	0	19
8/17/2014	28	41		8	7	12	0	17
8/18/2014	28	41		9	7	12	0	20
8/19/2014	43	56		9	7	12	2	20
8/20/2014	38	51		9	7	12	0	10
8/21/2014	28	41		9	7	12	0	20
8/22/2014	48	61		10	7	12	0	18
8/23/2014	44	57		9	7	12	0	19
8/24/2014	47	60		9	7	12	0	20 bucket test 4 min
8/25/2014	65	78		9	7	12	0	21
8/26/2014	49	62		9	7	12	0	20
8/27/2014	51	64		10	7	12	0	19
8/28/2014	49	62		9	7	6	0	9 pu off hfp
8/29/2014	43	56		8	7	6	5	0 restarted
8/30/2014	43	56		8	7	12	0	19
8/31/2014	59	72		8	7	12	0	20

Total

274

549

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FEB 25 2015

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