

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **ST**
 Deliverability

(See Instructions on Reverse Side)

Test Date:
6/22/14

API No. 15
023-20613-0000

Company Rosewood Resources, Inc.			Lease Willard		Well Number 1-26
County Cheyenne	Location NW NE/4	Section 26	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 5/27/2005		Plug Back Total Depth 1506'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1506'	Perforations 1294'	To 1328'
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	Gas Gravity - G _g .6
Vertical Depth(H) 1328'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-7		20 14 at 8:20		(AM) (PM) Taken 6-8	
Well on Line: Started 6-22		20 14 at 8:35		(AM) (PM) Taken 6-23	
		20 14 at 8:35		(AM) (PM) Taken 6-23	
		20 14 at 9:20		(AM) (PM) Taken 6-23	

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 _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						234	248.4				
Flow						57	71.4			24	

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 (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
						40		

(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 _d 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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog (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 12 day of December, 20 14.

Received 
KANSAS CORPORATION COMMISSION For Company

Witness (if any)

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 Willard 1-26 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: *Donald Martiny*

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.

W378
 Willard 01-26
 St. Francis
 St. Francis
 None
 June-134

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2013	58	71		44	0
6/2/2013	65	78		41	0
6/3/2013	65	78		40	0 turn on pumping unit
6/4/2013	85	96		41	0
6/5/2013	54	67		40	0
6/6/2013	55	68		41	0 turn off pumping unit
6/7/2013	139	152		26	9
6/8/2013	145	158		26	24
6/9/2013	147	160		0	24
6/10/2013	152	165		0	24
6/11/2013	155	168		0	24
6/12/2013	155	168		0	24
6/13/2013	159	169		0	24
6/14/2013	160	173		0	24
6/15/2013	161	174		0	24
6/16/2013	233	246		0	24
6/17/2013	233	246		0	24
6/18/2013	233	246		0	24
6/19/2013	234	247		0	24
6/20/2013	234	247		0	24
6/21/2013	234	247		0	24
6/22/2013	234	247		0	24
6/23/2013	126	139		49	5
6/24/2013	117	130		66	0
6/25/2013	93	106		41	0
6/26/2013	75	88		40	0
6/27/2013	87	100		40	0
6/28/2013	61	74		39	0 started pumping unit
6/29/2013	59	72		41	0
6/30/2013	59	72		46	0
7/1/2013					0

Total

661

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W378
 Willard 01-26
 St. Francis
 St. Francis
 None
 July-14

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2014	59	72		45	0	31
7/2/2014	58	71		45	0	32
7/3/2014	59	72		45	0	33
7/4/2014	59	72		45	0	32
7/5/2014	62	75		45	0	31
7/6/2014	62	75		45	0	32
7/7/2014	76	89		44	0	33
7/8/2014	62	75		44	0	32
7/9/2014	62	75		44	0	31
7/10/2014	63	76		44	0	32
7/11/2014	64	77		43	0	33
7/12/2014	66	79		43	0	32
7/13/2014	67	80		44	0	31
7/14/2014	72	85		43	0	32
7/15/2014	57	70		43	0	33
7/16/2014	57	70		43	0	31
7/17/2014	62	75		43	0	32
7/18/2014	59	72		43	0	33
7/19/2014	59	72		43	0	31
7/20/2014	60	73		43	0	32
7/21/2014	99	112		40	0	31
7/22/2014	143	156		4	22	31
7/23/2014	90	103		37	7	32
7/24/2014	65	78		42	3	4
7/25/2014	57	70		39	4	8 started pumping unit
7/26/2014	55	68		40	0	32
7/27/2014	55	68		40	0	33
7/28/2014	58	71		40	0	31
7/29/2014	62	75		40	0	32
7/30/2014	57	70		40	0	33
7/31/2014	61	74		40	0	31

Total

1279

937

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W378
 Willard 01-26
 St. Francis
 St. Francis
 None
 August-14

DATE	Casing PSI	STATIC	MCF	SPM	CYCLE	HRS DOWN	Water BBLs
8/1/2014	57	70	40	5.5	12	0	20
8/2/2014	57	70	40	5.5	12	0	20
8/3/2014	56	69	40	5.5	12	0	20
8/4/2014	57	70	40	5.5	12	0	20
8/5/2014	57	70	40	5.5	12	0	20
8/6/2014	57	70	40	5.5	12	0	20
8/7/2014	57	71	40	5.5	12	0	20
8/8/2014	60	73	40	5.5	12	0	20
8/9/2014	61	74	40	5.5	12	0	20
8/10/2014	62	75	40	5.5	12	0	20
8/11/2014	58	71	40	5.5	12	0	20
8/12/2014	56	69	40	5.5	12	0	20
8/13/2014	57	70	40	5.5	12	0	20
8/14/2014	56	69	40	5.5	12	0	20
8/15/2014	63	76	39	5.5	12	3	20
8/16/2014	61	74	39	5.5	12	0	20
8/17/2014	61	74	39	5.5	12	0	20
8/18/2014	61	74	40	5.5	12	0	20
8/19/2014	65	78	39	5.5	12	2	20
8/20/2014	65	78	39	5.5	12	0	20
8/21/2014	60	73	40	5.5	12	0	20
8/22/2014	66	79	40	5.5	12	0	20
8/23/2014	57	70	40	5.5	12	0	20
8/24/2014	59	72	40	5.5	12	0	20
8/25/2014	72	85	40	5.5	12	0	20
8/26/2014	60	73	41	5.5	12	0	20
8/27/2014	61	74	40	5.5	12	0	20
8/28/2014	61	74	41	5.5	12	0	10
8/29/2014	56	69	35	5.5	12	5	10
8/30/2014	56	69	35	5.5	12	0	20
8/31/2014	69	82	400	5.5	12	0	20

Total

1587

600

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS