

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **ASD**
 Deliverability

(See Instructions on Reverse Side)

Test Date:
6/22/14

API No. 15
023-20664-0000

Company Rosewood Resources, Inc.		Lease Hilt		Well Number 13-33	
County Cheyenne	Location NWSW	Section 33	TWP 2S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 3/30/2006		Plug Back Total Depth 1777'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1777.49'	Perforations 1618'	To 1646'
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) 1646'		Pressure Taps Flange		Gas Gravity - G _g .6 (Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-7		20 14 at 1:35		(AM) (PM) Taken 6-10	
Well on Line: Started 6-22		20 14 at 1:50		(AM) (PM) Taken 6-23	
		20 14 at 1:50		(AM) (PM) Taken 6-23	
		20 14 at 2:35		(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 _t) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _t) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						146	160.4				
Flow						44	58.4			360	

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
						11		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

(P _c) ² - (P _a) ² or (P _c) ² - (P _w) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a 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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- 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 10 day of December, 20 14.

Received
KANSAS CORPORATION COMMISSION

Jannul Martinez
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 Hilt 13-33 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

Received
KANSAS CORPORATION COMMISSION
FEB 25 2015
CONSERVATION DIVISION
WICHITA, KS

Signature: *Spencer Martiney*
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.

W437
 Hilt 13-33
 West St. Francis
 St. Francis
 None
 June-14

DATE	Casing PSI	STATIC MCF	SPM	HRS CYCLE	DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
6/1/2014	54	67	11	7	24	0	34
6/2/2014	69	82	11	7	24	0	33
6/3/2014	59	72	12	7	24	0	32
6/4/2014	85	98	12	7	24	0	33
6/5/2014	43	57	10	7	24	0	34
6/6/2014	49	62	11	7	12	0	17
6/7/2014	133	146	8	7	0	9	0
6/8/2014	136	149	0		0	24	0
6/9/2014	139	152	0		0	24	0
6/10/2014	146	159	0		0	24	0
6/11/2014	147	160	0			24	
6/12/2014	144	157	0			24	
6/13/2014	143	156	0			24	
6/14/2014	144	157	0			24	
6/15/2014	145	158	0			24	
6/16/2014	145	158	0			24	
6/17/2014	145	158	0			24	
6/18/2014	146	159	0			24	
6/19/2014	146	159	0			24	
6/20/2014	146	159	0			24	
6/21/2014	146	159	0			24	
6/22/2014	146	159	0			24	
6/23/2014	116	129	15			5	
6/24/2014	111	124	15			0	
6/25/2014	98	111	9			0	
6/26/2014	89	102	9			0	
6/27/2014	82	95	8			0	
6/28/2014	51	64	8	7	12	0	0 started pumping unit
6/29/2014	51	64	10	7	24	0	34
6/30/2014	50	63	10	7	12	0	17
7/1/2014						0	

Total

159

234

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS

W437
Hilt 13-33
West St. Francis
St. Francis
None
July-14

DATE	Casing			HRS		Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	STATIC MCF	SPM	CYCLE	DOWN		
7/1/2014	51	64	7	0	0	0	0
7/2/2014	50	63	7	0	0	0	0
7/3/2014	50	63	7	0	0	0	0
7/4/2014	50	63	7	0	0	0	0
7/5/2014	54	67	6	0	0	0	0
7/6/2014	54	67	6	0	0	0	0
7/7/2014	66	79	10	7	12	0	17 started pumping unit
7/8/2014	55	68	12	7	24	0	33
7/9/2014	55	68	12	7	24	0	34
7/10/2014	56	69	12	7	24	0	33 a lot of gas with water, put on auto
7/11/2014	57	70	12	7	24	0	32
7/12/2014	58	71	11	7	24	0	33
7/13/2014	59	72	11	7	24	0	34
7/14/2014	69	82	11	7	12	0	17
7/15/2014	49	62	11	7	12	0	17 bucket test 5 min and greased
7/16/2014	49	62	11	7	12	0	16
7/17/2014	48	61	11	7	12	0	18
7/18/2014	48	61	11	7	12	0	18 pu off, disposal down
7/19/2014	47	60	10	7	12	0	0
7/20/2014	47	60	10	7	12	0	18 turn on pu
7/21/2014	91	104	10	7	6	0	9 pu off, hfp
7/22/2014	166	179	2	7	0	22	0
7/23/2014	80	93	11	7	0	7	0
7/24/2014	57	70	9	7	0	3	0
7/25/2014	42	55	10	7	6	4	0 started pumping unit
7/26/2014	46	59	9	7	12	0	17
7/27/2014	47	60	10	7	12	0	16
7/28/2014	42	55	10	7	12	0	17
7/29/2014	37	50	11	7	12	0	18
7/30/2014	35	48	11	7	12	0	17
7/31/2014	37	40	11	7	12	0	16

Total

299

430

Received
KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
WICHITA, KS

W437
 Hilt 13-33
 West St. Francis
 St. Francis
 None
 August-14

DATE	Casing			SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF				
8/1/2014	35	48	11	7	12	0	17
8/2/2014	35	48	11	7	12	0	16
8/3/2014	35	48	11	7	12	0	17
8/4/2014	50	63	11	7	12	0	18
8/5/2014	50	63	11	7	12	0	17
8/6/2014	51	64	11	7	12	0	16
8/7/2014	52	65	11	7	12	0	17
8/8/2014	53	66	11	7	12	0	18
8/9/2014	53	66	11	7	12	0	17
8/10/2014	55	68	11	7	12	0	16
8/11/2014	51	64	11	7	12	0	17
8/12/2014	42	55	11	7	12	0	18
8/13/2014	35	48	10	7	12	0	17 bucket test 5 min
8/14/2014	34	47	11	7	12	0	16
8/15/2014	44	57	9	7	12	3	14
8/16/2014	33	46	11	7	12	0	15
8/17/2014	33	46	11	7	12	0	14
8/18/2014	33	46	11	7	12	0	15
8/19/2014	47	60	11	7	12	2	16
8/20/2014	42	55	11	7	12	0	17
8/21/2014	30	43	11	7	12	0	16
8/22/2014	60	73	12	7	12	0	15
8/23/2014	47	60	12	7	12	0	16
8/24/2014	49	62	12	7	12	0	17 bucket test 5 min
8/25/2014	66	79	12	7	12	0	16
8/26/2014	52	65	12	7	12	0	15
8/27/2014	55	68	12	7	12	0	16
8/28/2014	48	61	12	7	12	0	9 pu off hfp
8/29/2014	46	59	11	7	6	5	8 restarted
8/30/2014	46	59	11	7	12	0	16
8/31/2014	61	74	12	7	12	0	15

Total

346

487

Received
 KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION
 WICHITA, KS