

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **AS**
 Deliverability

(See Instructions on Reverse Side)

Test Date:
6/1/2015

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="checkbox"/> Yes / No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1646'		Pressure Taps Flange		Gas Gravity - G _g .6	
Pressure Buildup: Shut in 6-1 20 15 at 1:35 (AM) (PM) Taken 6-4 20 15 at 1:50 (AM) (PM)		Well on Line: Started 6-4 20 15 at 1:50 (AM) (PM) Taken 6-5 20 15 at 2:35 (AM) (PM)			

OBSERVED SURFACE DATA

Duration of Shut-in 96 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (P _m)	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						104	118.4				
Flow						46	60.4			96	

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _p) (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
						12		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 0.207
(P_g)² =

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

(P _c) ² - (P _g) ² or (P _c) ² - (P _w) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _g 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: $P_c^2 - P_w^2$	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 21 day of December, 20 15.

KCC WICHITA

Arnold Mautney
For Company

Witness (if any)

APR 07 2016

For Commission

For Company

Checked by

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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: 12/21/15

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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.

W437 WELL ID
 Hilt 13-33 LEASE NAME
 West St. Francis FIELD
 St. Francis AREA
 None EQUIPMENT
 June-15 DATE

DATE	Line PSI	Casing PSI	STATIC MCF	SPM	HRS CYCLE	DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
6/1/2015	88	88	101	0	0	0	24	0
6/2/2015	98	98	111	0	0	0	24	0
6/3/2015	103	103	116	0	0	0	24	0
6/4/2015	104	104	117	0	0	0	24	0
6/5/2015	95	95	108	17	0	0	0	0
6/6/2015	82	82'	95	17	6	12	0	0 turn on p u
6/7/2015	75	75	88	15	6	12	0	14
6/8/2015	66	66	79	14	6	12	0	16
6/9/2015	52	52'	65	12	6	12	0	15
6/10/2015	50	50	63	12	6	7	0	7
6/11/2015	49	49	62	10	6	12	0	7 pu kicked out, reset
6/12/2015	48	48'	61	11	6	12	0	14
6/13/2015	48	48	61	12	6	12	0	12
6/14/2015	48	48'	61	12	6	12	0	10
6/15/2015	47	47'	60	12	6	12	0	8 pu kicked out again, reset
6/16/2015	48	48	61	12	6	12	0	10 treated
6/17/2015	47	47	60	12	6	12	0	9
6/18/2015	49	49	62	12	6	12	0	9
6/19/2015	61	61	74	12	6	6	2	8
6/20/2015	58	58	71	2	6	0	22	0
6/21/2015	84	84	97	10	6	0	0	0
6/22/2015	60	60	73	13	6	6	0	12 started pu, builds pressure no water yet
6/23/2015	46	46	59	11	6	12	0	16
6/24/2015	46	46'	59	12	6	12	0	14
6/25/2015	46	46	59	12	6	12	0	14
6/26/2015	46	46	59	12	6	12	0	12
6/27/2015	46	46	59	12	6	12	0	13
6/28/2015	46	46	59	12	6	12	0	14
6/29/2015	46	46'	59	12	6	12	0	14
6/30/2015	47	47'	60	12	6	12	0	14
7/1/2015	-13	-13	0	0	6	12	0	14

Total

312

276

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W437
 WELL ID
 LEASE NAME
 West St. Francis
 FIELD
 St. Francis
 AREA
 None
 EQUIPMENT
 July-15
 DATE

DATE	Line	PSI	Casting	PSI	STATIC	MCF	SPM	CYCLE	DOWN	HRS	Water	BLS	REMARKS (Maximum length 110 characters)
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7/1/2015	46	46	46	46	59	11	6	12	0	14	0	14	
7/2/2015	46	46	46	46	59	10	6	6	0	7	0	14	7 belts were broke, only had 1 100, replaced are restarted
7/3/2015	46	46	46	46	59	11	6	12	0	14	0	14	
7/4/2015	47	47	47	47	60	12	6	12	0	14	0	14	
7/5/2015	47	47	47	47	60	12	6	12	0	14	0	14	
7/6/2015	53	53	53	53	66	12	6	12	2	15	0	14	
7/7/2015	46	46	46	46	59	12	6	12	0	14	0	14	
7/8/2015	46	46	46	46	59	12	6	16	0	14	0	14	
7/9/2015	52	52	52	52	65	0	6	0	24	7	0	14	7 turned off for comp work
7/10/2015	101	101	101	101	114	0	6	0	14	0	0	0	
7/11/2015	92	92	92	92	105	7	6	0	0	0	0	0	
7/12/2015	79	79	79	79	92	16	6	0	0	0	0	0	
7/13/2015	66	66	66	66	79	12	6	6	0	7	0	14	7 Turned PU back on auto
7/14/2015	49	49	49	49	62	11	6	12	0	14	0	14	
7/15/2015	46	46	46	46	59	11	6	12	0	14	0	14	
7/16/2015	46	46	46	46	59	11	6	12	0	14	0	14	
7/17/2015	46	46	46	46	59	12	6	12	0	14	0	14	
7/18/2015	46	46	46	46	59	12	6	12	0	14	0	14	
7/19/2015	45	45	45	45	58	12	6	12	0	13	0	13	
7/20/2015	45	45	45	45	58	12	6	12	0	13	0	13	
7/21/2015	55	55	55	55	68	12	6	12	4	14	4	14	14 bringing water
7/22/2015	46	46	46	46	59	12	6	12	0	14	0	14	
7/23/2015	45	45	45	45	58	12	6	12	0	14	0	14	
7/24/2015	45	45	45	45	58	12	6	12	0	14	0	14	
7/25/2015	45	45	45	45	58	12	6	12	0	14	0	14	
7/26/2015	45	45	45	45	58	12	6	12	0	14	0	14	
7/27/2015	44	44	44	44	57	11	6	12	0	14	0	14	
7/28/2015	44	44	44	44	57	10	6	12	0	14	0	14	
7/29/2015	44	44	44	44	57	9	6	12	0	14	0	14	7 Restarted
7/30/2015	44	44	44	44	57	9	6	12	0	14	0	14	7 Restarted
7/31/2015	44	44	44	44	57	10	6	12	0	14	0	14	
Total													
329													
341													

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W437 WELL ID
 Hill 13-33 LEASE NAME
 West St. Francis FIELD
 St. Francis AREA
 None EQUIPMENT
 August-15 DATE

DATE	Line PSI	Casing PSI	STATIC	MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2015	44	44	57	11	6	12	0	14
8/2/2015	45	45	58	11	6	6	0	7
8/3/2015	45	45	58	10	0	0	0	0
8/4/2015	44	44	57	9	6	6	0	7 reset panel
8/5/2015	44	44	57	10	6	12	0	14
8/6/2015	44	44	57	11	6	12	0	14
8/7/2015	44	44	57	11	6	12	0	14
8/8/2015	44	44	57	11	6	12	0	14
8/9/2015	44	44	57	12	6	12	0	14
8/10/2015	44	44	57	12	6	12	0	14
8/11/2015	44	44	57	12	6	12	0	14
8/12/2015	44	44	57	12	6	12	0	14
8/13/2015	45	45	58	12	6	12	0	14
8/14/2015	45	45	58	12	6	12	0	7
8/15/2015	46	46	59	12	6	6	0	0
8/16/2015	47	47	60	12	6	0	0	0
8/17/2015	46	46	59	12	6	0	0	0
8/18/2015	46	46	59	11	6	0	0	0
8/19/2015	47	47	60	10	6	6	0	7
8/20/2015	46	46	59	11	6	12	0	14
8/21/2015	47	47	60	11	6	12	0	14
8/22/2015	47	47	60	12	6	12	0	14
8/23/2015	47	47	60	12	6	12	0	14
8/24/2015	47	47	60	12	6	12	0	14
8/25/2015	49	49	62	12	6	12	0	14
8/26/2015	48	48	61	12	6	12	0	14
8/27/2015	46	46	59	12	6	12	0	14
8/28/2015	46	46	59	12	6	12	0	14
8/29/2015	48	48	61	12	6	12	0	14
8/30/2015	50	50	63	12	6	12	0	14
8/31/2015	52	52	65	12	6	12	0	14

Total

355

336

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