

## KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow  
 Deliverability

SI 24hr.

(See Instructions on Reverse Side)

Test Date:

9-11-04

API No. 15 - 023-20590-0000

Company <i>Rosewood Resources</i>		Lease <i>Isernhagen</i>			Well Number <i>2-22</i>
County <i>Cherokee</i>	Location <i>NE NW</i>	Section <i>22</i>	TWP <i>3S</i>	RNG (E/W) <i>41W</i>	Acres Attributed <i>80</i>
Field <i>Cherry Creek</i>		Reservoir <i>Nipbrara</i>	Gas Gathering Connection <i>B.S.I</i>		
Completion Date <i>9-1-04</i>		Plug Back Total Depth <i>1400</i>	Packer Set at		
Casing Size <i>4.5"</i>	Weight <i>10.5</i>	Internal Diameter <i>4.052"</i>	Set at <i>1411</i>	Perforations <i>1261</i>	To <i>1297</i>
Tubing Size <i>None</i>	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) <i>SINGLE (Vertical)</i>		Type Fluid Production <i>GAS &amp; wtr</i>	Pump Unit or Traveling Plunger? Yes / <input checked="" type="checkbox"/> No		
Producing Thru <u>(Annulus)</u> Tubing <i>Casing</i>		% Carbon Dioxide <i>1.0</i>	% Nitrogen <i>18.0</i>	Gas Gravity - G <sub>g</sub> <i>0.64</i>	
Vertical Depth(H) <i>1420</i>		Pressure Taps		(Meter Run) (Prover) Size	
Pressure Buildup: Shut in	<i>9/9/04</i>	at	<i>7</i>	(AM) (PM) Taken	<i>9-11 2004</i>
Well on Line: Started	<i>9/11</i>	at	<i>7</i>	(AM) (PM) Taken	<i>9-13 2004</i>

### OBSERVED SURFACE DATA

Duration of Shut-in *24* Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (P <sub>m</sub> )	Pressure Differential in Inches H <sub>2</sub> O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						<i>235</i>	<i>269.4</i>				
Flow						<i>205</i>	<i>219.4</i>			<i>24</i>	

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F <sub>g</sub>	Flowing Temperature Factor F <sub>tt</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						<i>41</i>		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>a</sub>)<sup>2</sup> = 0.207

(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P<sub>c</sub>)<sup>2</sup> = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ :

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>a</sub> ) <sup>2</sup> or (P <sub>w</sub> ) <sup>2</sup> - (P <sub>a</sub> ) <sup>2</sup>	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	Choose formula 1 or 2: 1. P <sub>c</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> 2. P <sub>w</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> divided by: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	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" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcf/d)
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<b>JAN 24 2005</b>							

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 14 day of January, 20 05.

\_\_\_\_\_  
Witness (if any)

\_\_\_\_\_  
For Commission

\_\_\_\_\_  
For Company

\_\_\_\_\_  
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 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.

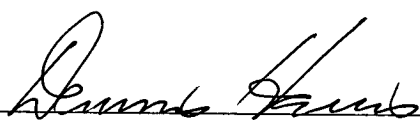
I hereby request a one-year exemption from open flow testing for the Isernhagen 2-22 gas well on the grounds that said well:

(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: 1/14/05

Signature:   
Title: Reserv Engineer

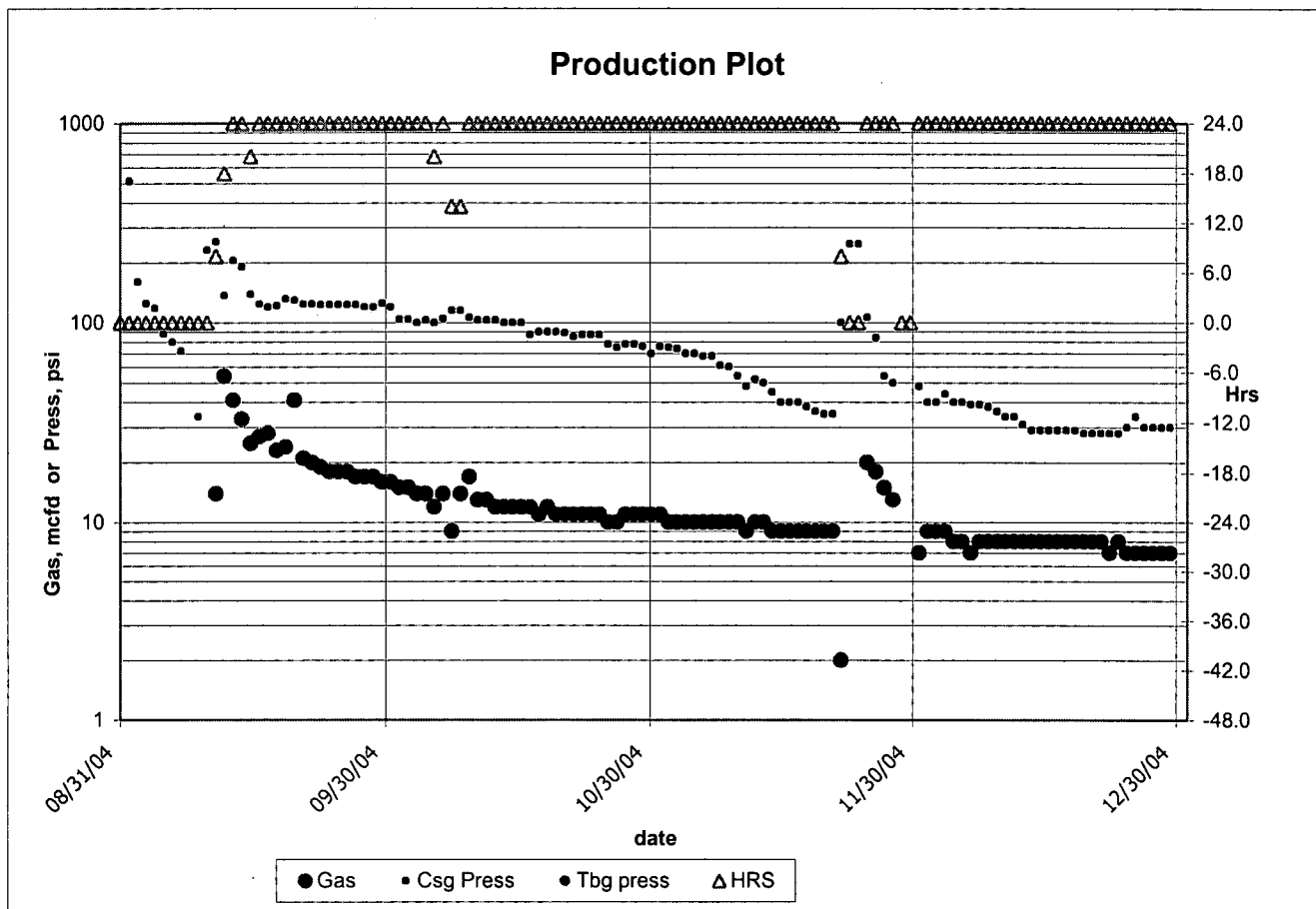
**Instructions:** If a gas well meets one of the eligibility criteria set out in KCC regulation K.A.R. 82-3-304, the operator may complete the statement provided above in order to claim exempt status for the gas well.

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.

Actual  
ISERNHAGEN 02-22

	Gas	Csg Press	Tbg Press	Line Press	Hrs	Remarks
2004/01	null	null	null	null	null	null
2004/02	null	null	null	null	null	null
2004/03	null	null	null	null	null	null
2004/04	null	null	null	null	null	null
2004/05	null	null	null	null	null	null
2004/06	null	null	null	null	null	null
2004/07	null	null	null	null	null	null
2004/08	null	null	null	null	null	null
2004/09	491	143.5	null	null	22.7	null
2004/10	379	94.5	null	null	23.2	null
2004/11	270	72.3	null	null	23.4	null
2004/12	241	33.2	null	null	24.0	null
<b>TOTAL</b>	<b>1381</b>	<b>85.9</b>			<b>23.3</b>	



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Actual						
ISERNHAGEN 02-22						
	Gas Csg	Press	Tbg Press	Line Press	Hrs	Remarks
10/16/2004	12	100.0	null	null	24.0	
10/17/2004	12	87.0	null	null	24.0	
10/18/2004	11	90.0	null	null	24.0	
10/19/2004	12	90.0	null	null	24.0	
10/20/2004	11	90.0	null	null	24.0	
10/21/2004	11	89.0	null	null	24.0	
10/22/2004	11	85.0	null	null	24.0	
10/23/2004	11	87.0	null	null	24.0	
10/24/2004	11	87.0	null	null	24.0	
10/25/2004	11	87.0	null	null	24.0	
10/26/2004	10	78.0	null	null	24.0	
10/27/2004	10	75.0	null	null	24.0	
10/28/2004	11	78.0	null	null	24.0	
10/29/2004	11	78.0	null	null	24.0	
10/30/2004	11	76.0	null	null	24.0	
10/31/2004	11	70.0	null	null	24.0	
11/01/2004	11	76.0	null	null	24.0	
11/02/2004	10	75.0	null	null	24.0	
11/03/2004	10	74.0	null	null	24.0	
11/04/2004	10	70.0	null	null	24.0	
11/05/2004	10	70.0	null	null	24.0	
11/06/2004	10	68.0	null	null	24.0	
11/07/2004	10	68.0	null	null	24.0	
11/08/2004	10	61.0	null	null	24.0	
11/09/2004	10	60.0	null	null	24.0	
11/10/2004	10	54.0	null	null	24.0	
11/11/2004	9	48.0	null	null	24.0	
11/12/2004	10	52.0	null	null	24.0	
11/13/2004	10	50.0	null	null	24.0	
11/14/2004	9	45.0	null	null	24.0	
11/15/2004	9	40.0	null	null	24.0	
11/16/2004	9	40.0	null	null	24.0	
11/17/2004	9	40.0	null	null	24.0	
11/18/2004	9	38.0	null	null	24.0	
11/19/2004	9	36.0	null	null	24.0	
11/20/2004	9	35.0	null	null	24.0	
11/21/2004	9	35.0	null	null	24.0	
11/22/2004	2	100.0	null	null	8.0	SI 16
11/23/2004	0	248.0	null	null	0.0	SI 40
11/24/2004	0	248.0	null	null	0.0	SI 64
11/25/2004	20	106.0	null	null	24.0	
11/26/2004	18	84.0	null	null	24.0	
11/27/2004	15	54.0	null	null	24.0	
11/28/2004	13	50.0	null	null	24.0	
11/29/2004	null	null	null	null	null	SI
11/30/2004	null	null	null	null	null	SI
12/01/2004	7	48.0	null	null	24.0	
12/02/2004	9	40.0	null	null	24.0	
12/03/2004	9	40.0	null	null	24.0	
12/04/2004	9	44.0	null	null	24.0	
12/05/2004	8	40.0	null	null	24.0	
12/06/2004	8	40.0	null	null	24.0	
12/07/2004	7	39.0	null	null	24.0	
12/08/2004	8	39.0	null	null	24.0	
12/09/2004	8	38.0	null	null	24.0	
12/10/2004	8	36.0	null	null	24.0	
12/11/2004	8	34.0	null	null	24.0	
12/12/2004	8	34.0	null	null	24.0	
12/13/2004	8	31.0	null	null	24.0	
12/14/2004	8	29.0	null	null	24.0	
12/15/2004	8	29.0	null	null	24.0	
12/16/2004	8	29.0	null	null	24.0	
12/17/2004	8	29.0	null	null	24.0	
12/18/2004	8	29.0	null	null	24.0	
12/19/2004	8	29.0	null	null	24.0	
12/20/2004	8	28.0	null	null	24.0	
12/21/2004	8	28.0	null	null	24.0	
12/22/2004	8	28.0	null	null	24.0	
12/23/2004	7	28.0	null	null	24.0	
12/24/2004	8	28.0	null	null	24.0	
12/25/2004	7	30.0	null	null	24.0	
12/26/2004	7	34.0	null	null	24.0	
12/27/2004	7	30.0	null	null	24.0	
12/28/2004	7	30.0	null	null	24.0	
12/29/2004	7	30.0	null	null	24.0	
12/30/2004	7	30.0	null	null	24.0	
12/31/2004	7	28.0	null	null	24.0	
2004	1381	85.9	null	null	23.3	

Actual  
ISERNHAGEN 02-22

	Gas Csg	Press	Tbg	Press Line	Press	Hrs	Remarks
08/01/2004	null	null	null	null	null	null	
08/02/2004	null	null	null	null	null	null	
08/03/2004	null	null	null	null	null	null	
08/04/2004	null	null	null	null	null	null	SPUD. Set Surf @202 WOC&WOCTDR
08/05/2004	null	null	null	null	null	null	WOCTDR
08/06/2004	null	null	null	null	null	null	WOCTDR
08/07/2004	null	null	null	null	null	null	WOCTDR
08/08/2004	null	null	null	null	null	null	WOCTDR
08/09/2004	null	null	null	null	null	null	WOCTDR
08/10/2004	null	null	null	null	null	null	WOCTDR
08/11/2004	null	null	null	null	null	null	WOCTDR
08/12/2004	null	null	null	null	null	null	TD @1420 Set Csg@ 1411. WOCT
08/13/2004	null	null	null	null	null	null	WOCT
08/14/2004	null	null	null	null	null	null	WOCT
08/15/2004	null	null	null	null	null	null	WOCT
08/16/2004	null	null	null	null	null	null	WOCT
08/17/2004	null	null	null	null	null	null	WOCT
08/18/2004	null	null	null	null	null	null	WOCT
08/19/2004	null	null	null	null	null	null	WOCT
08/20/2004	null	null	null	null	null	null	WOCT
08/21/2004	null	null	null	null	null	null	WOCT
08/22/2004	null	null	null	null	null	null	WOCT
08/23/2004	null	null	null	null	null	null	WOCT
08/24/2004	null	null	null	null	null	null	WOCT
08/25/2004	null	null	null	null	null	null	WOCT
08/26/2004	null	null	null	null	null	null	WOCT
08/27/2004	null	null	null	null	null	null	WOCT
08/28/2004	null	null	null	null	null	null	WOCT
08/29/2004	null	null	null	null	null	null	WOCT
08/30/2004	null	null	null	null	null	null	PBTD 1411. Perf 1261-1297 spf 2 & SI
08/31/2004	null	null	null	null	null	null	WOFU
09/01/2004	0	514.0	null	null	null	0.0	N2Frac 100k# SICP 2hr & flo to pit
09/02/2004	0	160.0	null	null	null	0.0	FCP 16//64 Chk G& LSOW
09/03/2004	0	125.0	null	null	null	0.0	FCP 16//64 Chk G& LSOW
09/04/2004	0	118.0	null	null	null	0.0	FCP 22//64 Chk Gas Lite mist & SOW
09/05/2004	0	88.0	null	null	null	0.0	FCP 22//64 Chk Gas w/1"strm Wtr
09/06/2004	0	80.0	null	null	null	0.0	FCP 22//64 Chk Gas Lite mist & SOW
09/07/2004	0	72.0	null	null	null	0.0	FCP 22//64 Chk Gas Hvy mist & SOW
09/08/2004	0	null	null	null	null	0.0	FCP 22//64 Chk Gas Hvy mist & SOW
09/09/2004	0	34.0	null	null	null	0.0	FCP 22//64 Chk Gas Hvy mist & SOW
09/10/2004	0	231.0	null	null	null	0.0	FCP 22//64 Chk G&W slugs. SI.
09/11/2004	14	255.0	null	null	null	8.0	SI & G-2 taken, put on line
09/12/2004	54	137.0	null	null	null	18.0	
09/13/2004	41	205.0	null	null	null	24.0	
09/14/2004	33	190.0	null	null	null	24.0	
09/15/2004	25	139.0	null	null	null	20.0	
09/16/2004	27	124.0	null	null	null	24.0	
09/17/2004	28	120.0	null	null	null	24.0	
09/18/2004	23	122.0	null	null	null	24.0	
09/19/2004	24	132.0	null	null	null	24.0	
09/20/2004	41	130.0	null	null	null	24.0	
09/21/2004	21	124.0	null	null	null	24.0	
09/22/2004	20	124.0	null	null	null	24.0	
09/23/2004	19	123.0	null	null	null	24.0	
09/24/2004	18	123.0	null	null	null	24.0	
09/25/2004	18	123.0	null	null	null	24.0	
09/26/2004	18	123.0	null	null	null	24.0	
09/27/2004	17	123.0	null	null	null	24.0	
09/28/2004	17	120.0	null	null	null	24.0	
09/29/2004	17	120.0	null	null	null	24.0	
09/30/2004	16	125.0	null	null	null	24.0	
10/01/2004	16	120.0	null	null	null	24.0	
10/02/2004	15	104.0	null	null	null	24.0	
10/03/2004	15	104.0	null	null	null	24.0	
10/04/2004	14	100.0	null	null	null	24.0	
10/05/2004	14	103.0	null	null	null	24.0	
10/06/2004	12	100.0	null	null	null	20.0	
10/07/2004	14	105.0	null	null	null	24.0	
10/08/2004	9	115.0	null	null	null	14.0	
10/09/2004	14	115.0	null	null	null	14.0	
10/10/2004	17	106.0	null	null	null	24.0	
10/11/2004	13	103.0	null	null	null	24.0	
10/12/2004	13	103.0	null	null	null	24.0	
10/13/2004	12	103.0	null	null	null	24.0	
10/14/2004	12	100.0	null	null	null	24.0	
10/15/2004	12	100.0	null	null	null	24.0	

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