## Kansas Corporation Commission One Point Stabilized Open Flow or Deliverability Test

Type Test		_		OINI SI		(See Instruc					NADILII	1 1 1	<b>J</b> 1		
Open Flow Deliverabilty				Test Date: 2/4/2009				API No. 15 15-181-20400-00 -							
Company		ources					Lease G. Ihrig	]					31-20	Well Nu	ımber
County Location Sherman NWNE					Section TWP 20 7S				RNG (E/W) 39W				Acres Attributed		
Field Goodland				Reservoir Niobrara				Gas Gathering Connection Branch Systems Inc.							
Completic 3/19/200					Plug Back Total Depth 1178'				Packer Set at						
Casing S 2 7/8"	Casing Size Weight				Internal I 2.441	Diameter		Set at 1179'		erfora 984'	tions	то 1008'			
Tubing Si	ze	Wei	ight		Internal Diameter Set at				ı	Perfora	tions	То			
Type Con Single (		Describe)			Type Flui	id Productio	าก			np Unit	or Traveling	Plunger	? Yes	/No	
	Thru (A	nnulus / Tub	ing)		% Carbon Dioxide				% Nitrogen				Gas Gravity - G <sub>g</sub> .6		
Vertical Depth(H) 1008'					Pressure Taps Flange						. ,			Run) (P	rover) Size
Pressure	Buildup:	Shut in2	-3	20	09 at 1:05 (AM) (PM) Taken 2				-4	4 20 09 at			at 1:20 (AM) (AM)		
Well on L	ine:	Started 2	-4	20	09 at 1	:20	(AM)(PM)	Taken 2-	-5		20	09 at	2:05		(AM)(PM)
						OBSERVE	D SURFAC	E DATA				Duration	of Shut-	72	Hours
Static / Dynamic Property	Dynamic Size		Prover Pressure   In		Flowing Well Head Temperature		Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> ) psig psia		(	Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> ) psig psia		Duration (Hours)		Liquid Produced (Barrels)	
Shut-In							12	26.4		po.g	polu				
Flow							16	30.4				72		0	
					1	FLOW STE	REAM ATT	RIBUTES				-			T
Plate Coeffiecient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd		Circle one: Meter or Prover Pressure psia		Press Extension P <sub>m</sub> x h	Gravity Factor F <sub>g</sub>		Flowing Temperature Factor F <sub>11</sub>	Temperature Fa		iation Metered Flo ctor R : pv (Mcfd)			GOR (Cubic Fee Barrel)	et/	Flowing Fluid Gravity G <sub>m</sub>
										1	6				
(P <sub>c</sub> ) <sup>2</sup> =	:	(P <sub>w</sub> ):	² <b>=</b>	:	(OPEN FL	OW) (DELIV		/) CALCUL P <sub>c</sub> - 14.4) +			:		(P <sub>a</sub> )² (P <sub>d</sub> )²	? = 0.2 ? =	907
		Choose formula 1 or 2:  (P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> 1. P <sub>c</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> 2. P <sub>c</sub> <sup>2</sup> - P <sub>d</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:		Backpressure Curve Slope = "n" or Assigned Standard Slope		•	n x LOG		Antilog		Open Flow Deliverability Equals R x Antilog (Mcfd)		
Open Flov	w			Mcfd @ 14.6	5 psia		Deliveral	bility			<u> </u>	Mcfd @	14.65 psi	a	
	_	_		ehalf of the (							above repor	rt and th	at he ha	s know	rledge of
		Witnes	s (if an	y)			-			OT	For C	ompany	معی		RECEIVED
		For Co	mmissio	on			-				Chec	ked by	KANS	SAS CO	RPORATION C

exempt status under and that the forego correct to the best of equipment instal I hereby reques	r penalty of perjury under the laws of the state of Kansas that I am authorized to request er Rule K.A.R. 82-3-304 on behalf of the operator Rosewood Resources, Inc.  Ding pressure information and statements contained on this application form are true and of my knowledge and belief based upon available production summaries and lease records lation and/or upon type of completion or upon use being made of the gas well herein named. Set a one-year exemption from open flow testing for the G. Ihrig 31-20 unds that said well:
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	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 to supply to the best of my ability any and all supporting documents deemed by Commission to corroborate this claim for exemption from testing.
	Signature:

## 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.

RECEIVED KANSAS CORPORATION COMMISSIO

W2056 G. Ihrig 31-20 North Goodland Goodland None February-09

	Casing			HI	RS	REMARKS
DATE	PSI	STATIC	MCF	DO	NWC	(Maximum length 110 characters)
2/1/2009	1	2 2	5	15	0	
2/2/2009	1	2 2	5	15	0	
2/3/2009	1	8 3	1	8	12	
2/4/2009	1	8 3	1	0	24	
2/5/2009	1	8 3	1	0	24	
2/6/2009	1	8 3	1	0	24	
2/7/2009	1	8 3	1	3	10	bp
2/8/2009	1	6 2	9	17	0	
2/9/2009	1	6 2	9	17	0	
2/10/2009	1	6 2	9	13	5	
2/11/2009	1	6 2	9	13	2	
2/12/2009	1	5 2	8	15	0	
2/13/2009	1	4 2	7	15	0	
2/14/2009	1	4 2	7	15	0	
2/15/2009	1	4 2	7	15	0	
2/16/2009	1	4 2	7	15	0	
2/17/2009	1	4 2	7	15	0	
2/18/2009	1	4 2	7	15	0	bp
2/19/2009	1	4 2	7	15	0	
2/20/2009	1	4 2	7	15	0	
2/21/2009	1	4 2	7	15	0	
2/22/2009	1	4 2	7	15	0	
2/23/2009	1	4 2	7	15	0	
2/24/2009	1	4 2	7	15	0	
2/25/2009	1	4 2	7	15	0	
2/26/2009	1	3 20	5	15	0	
2/27/2009	1	3 2	5	15	6	
2/28/2009	1	3 20	5	12	6	
3/1/2009					0	
3/2/2009					0	
3/3/2009					0	

Total 353

RECEIVED KANSAS CORPORATION COMMISSION

W2056 G. Ihrig 31-20 North Goodland Goodland None March-09

	Casing			HRS		REMARKS
DATE	PSI	STATIC	MCF	DOWN		(Maximum length 110 characters)
3/1/2009	10	5 29	)	3	0	
3/2/2009	1:	5 28	}	7	0	
3/3/2009	1:	5 28	}	10	0	
3/4/2009	1:	5 28	}	12	0	
3/5/2009	1:	5 28	}	16	0	bp
3/6/2009	1:	5 28	}	16	0	
3/7/2009	1:	5 28	}	16	0	
3/8/2009	1:	5 28	;	16	0	
3/9/2009	1:	5 28	1	16	0	
3/10/2009	1:	5 28	;	16	0	
3/11/2009	1:	5 28	;	16	0	
3/12/2009	13	3 26	· •	16	0	
3/13/2009	13	3 26	i	16	0	
3/14/2009	13	3 26	,	16	0	
3/15/2009	1:	5 28		16	0	
3/16/2009	1:	5 28		16	0	
3/17/2009	1:	5 28		16	0	
3/18/2009	12	2 25		16	0	
3/19/2009	12	2 25		16	0	
3/20/2009	12	2 25		16	0	
3/21/2009	12	2 25		16	0	
3/22/2009	12	2 25		16	0	
3/23/2009	12	2 25		16	0	
3/24/2009	12	2 25		16	0	
3/25/2009	12	2 25		16	0	
3/26/2009	12	2 25		16	0	
3/27/2009	12	2 25		16	0	
3/28/2009	12	2 25		16	0	
3/29/2009	12	2 25		16	0	
3/30/2009	12	2 25		16	0	
3/31/2009	12	2 25		16	0	

Total 464

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