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

Type Tes	t:	The T			(	See Instruc	tions on Re	verse Side	∍)						
☐ ot	en Flow	BSI			Test Date	a•			ΔΡ	I No. 15					
De	eliverabil	ty			6/22/14					3-20633-00 <b>t</b>	Q				
Company Rosewo	y od Res	ources, In	с.			<u></u>	Lease R. Moor	e				33-28	Well Nu	mber	
County Location S Cheyenne NWSE			Section 28				RNG (E/W) 42W			Acres Attributed 80					
					Reservoir Niobrara			Gas Gathering Connection Branch Systems Inc.							
			Plug Bac 1771'	Plug Back Total Depth 1771'				Packer Set at							
Casing Size Weight 2.7/8" 6.5#			Internal I 2.441	Internal Diameter Set 2.441 17			Perforations 1648'			To 1680'					
Tubing S	ize	W	eight		Internal [	Internal Diameter Set at			Perforations			То			
Type Cor		(Describe) entional)			Type Flui	d Production	n		Pump U	nit or Traveling	g Plung	er? Yes	(No)		
	g Thru (	Annulus / T	ubing)		% C	% Carbon Dioxide				% Nitrogen			Gas Gravity - G <sub>g</sub>		
Vertical E				<del></del> .		Pressure Taps				<del></del>		.6 (Meter	Run) (Pi	rover) Size	
1664'	, ,					Flan	•					2"	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
Pressure	Buildup	: Snut in .				14 at 1:45 (AM)(PM) Taken 6						14 at 2:00 (AMX)		AM)(PM)	
Well on L	.ine:	Started _	6-22	2	0 <u>14</u> at <u>2</u>	14 at 2:00 (AM) (PM) Taken 6-			23	23 20 14 at 2			at 2:45 (AM)(PM)		
						OBSERVE	D SURFACE	DATA			Durati	on of Shut-	<sub>in</sub> 360	Ho <u>u</u>	
Static / Orifice Dynamic Size Property (inches)		Prover Pressure in		Flowing Temperature t	emperature Temperature		Casing Wellhead Pressure (P <sub>w</sub> ) or (P,) or (P <sub>s</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Duration (Hours)		Liquid Produced (Barrels)		
Shut-In				moned 11 <sub>2</sub> 0			191	205.4	psig	psia			<u> </u>		
Flow		<u> </u>			<u></u>	<u> </u>	48	62.4	<u> </u>		360		0		
						FLOW STR	EAM ATTR	BUTES		<del></del>			_		
Plate Coeffiecient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd		Brouge Broggiero		Press Extension	Fact	Gravity Factor F <sub>g</sub>		Deviation Factor F <sub>pv</sub>		Metered Flow R (Mcfd)		GOR (Cubic Feet/ Barrel)		Flowing Fluid Gravity G <sub>m</sub>	
								2							
					(OPEN FL	OW) (DELIV	ERABILITY)	CALCUL	ATIONS				<sup>2</sup> = 0.2	07	
P <sub>c</sub> ) <sup>2</sup> =		: (P,	")² =	<del>:</del>	$P_d =$		% (P	<u>-</u> 14.4) +	14.4 = _	<del>:</del> _		(P <sub>d</sub> ):	² <u>-</u>		
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		$(P_c)^2 - (P_w)^2$ 1.		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>	- P <sup>2</sup> LOG of formula - P <sup>2</sup> 1. or 2. and divide P <sup>2</sup> P <sup>2</sup>		Backpressure Curve Slope = "n"		n x LOG		Antilog Ed		Deli Equals	Open Flow Deliverability Equals R x Antilo (Mcfd)	
	<del>-  -</del>		divid	ded by: $P_c^2 - P_w^2$	by:		Standa	ard Slope	-		_		<del>                                     </del>		
Open Flo	w			Mcfd @ 14.	65 psia		Deliverab	ility			Mcfd @	14.65 psi	ia		
			•				•			ne above repo	ort and	that he ha	ıs know	edge of	
ie facts s	tated the	erein, and th	at said	report is true	and correc					December		1/05		20 14	
		Witn	iess (if an	у)			ON COMMISSIO	N /	M	<u>NiMU</u>	Company	uul	w	e j	
	<del></del>	For	Commissi	on		F <del>EB 2</del> 5	2015 <sup>-</sup>			Che	cked by	<u></u>			

CONSERVATION DIVISION WICHITA, KS

exempt status und and that the fore correct to the bes	er penalty of perjury under the laws of the state of Kansas that I am authorized to request der Rule K.A.R. 82-3-304 on behalf of the operator Rosewood Resources, Inc.  going pressure information and statements contained on this application form are true and tof my knowledge and belief based upon available production summaries and lease records allation and/or upon type of completion or upon use being made of the gas well herein named.
I hereby requ	est a one-year exemption from open flow testing for the R. Moore 33-28  ounds that said well:
<del></del>	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 e to supply to the best of my ability any and all supporting documents deemed by Commission y to corroborate this claim for exemption from testing.
	Received CORPORATION COMMISSION Signature: Manual Martiney  FEB 2 5 2015 Title: Production Assistant  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.

W438 R. Moore 33-28 West St. Francis St. Francis None June-14

•	Casing			HRS	REMARKS
DATE	PSI	STATIC MCF		DOWN	(Maximum length 110 characters)
6/1/2014	54	68	2	0	
6/2/2014	69	82	1	0	
6/3/2014	62	76	2	0	
6/4/2014	82	96	2	0	
6/5/2014	45	59	2	0	
6/6/2014	50	63	2	0	
6/7/2014	177	190	1	9	
6/8/2014	173	186	0	24	
6/9/2014	180	193	0	24	
6/10/2014	180	193	0	24	
6/11/2014	181	194	0	24	
6/12/2014	183	196	0	24	
6/13/2014	185	198	0	24	
6/14/2014	186	200	0	24	
6/15/2014	186	200	0	24	
6/16/2014	188	202	0	24	
6/17/2014	188	202	0	24	
6/18/2014	189	203	0	24	
6/19/2014	190	204	0	24	
6/20/2014	190	203	0	24	
6/21/2014	191	204	0	24	
6/22/2014	191	204	0	24	
6/23/2014	117	130	0	5	
6/24/2014	112	125	0	0	
6/25/2014	99	112	2	0	
6/26/2014	90	<del>-</del> -	3	0	
6/27/2014	82	96	3	0	
6/28/2014	51	65	3	0	
6/29/2014	51	65	3	0	
6/30/2014	49	63	3	0	
7/1/2014				0	

Total 29

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W438 R. Moore 33-28 West St. Francis St. Francis None July-14

	Casing			HRS	REMARKS
DATE	PSI	STATIC N	ИCF	DOWN	(Maximum length 110 characters)
7/1/2014	51	65	2	0	
7/2/2014	51	65	2	0	
7/3/2014	51	65	2	0	
7/4/2014	52	65	2	0	
7/5/2014	55	68	2	0	
7/6/2014	55	68	2	0	
7/7/2014	66	79	2	0	
7/8/2014	56	69	2	0	
7/9/2014	56	69	2	0	
7/10/2014	57	70	2	0	
7/11/2014	58	71	2	0	
7/12/2014	59	72	2	0	
7/13/2014	60	73	2	0	
7/14/2014	71	84	2	0	
7/15/2014	50	63	2	0	
7/16/2014	50	63	2	0	
7/17/2014	50	63	2	0	
7/18/2014	50	63	2	0	
7/19/2014	48	61	2	0	
7/20/2014	48	<b>6</b> 1	2	0	
7/21/2014	113	126	2	0	
7/22/2014	162	176	0	22	
7/23/2014	80	94	3	7	
7/24/2014	54	69	2	3	
7/25/2014	45	59	2	4	
7/26/2014	46	60	2	0	
7/27/2014	47	61	2		
7/28/2014	38	52	2	0	
7/29/2014	37	51	2		
7/30/2014	36	50	2		
7/31/2014	39	_53	2	0	

Total 61

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W438 R. Moore 33-28 West St. Francis St. Francis None August-14

	Casing			HRS	REMARKS
DATE	PSI.	STATIC 1	MCF	DOWN	(Maximum length 110 characters)
8/1/2014	37	50	2	0	•
8/2/2014	37	50	2	0	
8/3/2014	36	49	2	0	
8/4/2014	51	64	2	0	
8/5/2014	51	64	2	0	
8/6/2014	51	64	2	0	
8/7/2014	53	66	2	0	
8/8/2014	54	67	2	0	
8/9/2014	54	67	2	0	
8/10/2014	56	69	1	0	
8/11/2014	51	65	1	0	
8/12/2014	49	53	1	0	
8/13/2014	34	48	2		
8/14/2014	34	48	2	0	
8/15/2014	43	56	1	3	
8/16/2014	34	47	2		
8/17/2014	34	47	2		
8/18/2014	34	47	2	0	
8/19/2014	47	60	2		
8/20/2014	42	2 55	2		
8/21/2014	37	51	2	0	
8/22/2014	54	68	1		
8/23/2014	4′.	7 61	1		
8/24/2014	49		1		
8/25/2014	62	2 75	1	0	
8/26/2014	52		1		
8/27/2014	54		1		
8/28/2014	48		2		
8/29/2014	48		2		
8/30/2014	48	61	2		
8/31/2014	6	74	1	0	·

Total 51

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