KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test Op De	:: en Flov liverabl	w j	MSI			Test Date) :	ructi	ions on Re	verse Side	ΑP	I No. 15 1-20427-01-(nn ~ (2	/		
Company Rosewoo		soui	rces, Inc.			2/4/2010	-		Lease G. Ihrig			£U721*U (*\ -	.u , y <u>e</u>		Well Ni	ımber
County Location Sherman NENW						Section 20				TWP RNG (E/W) 7S 39W			Acres Attributed 80			
Field Goodland						Reservoir Niobrara				Gas Gathering Conne Branch Systems Inc					•	
Completion Date 8/29/2006					·	Plug Back Total Depti 3266'				Packer Set at			-			
Casing Size 4 1/2"			Weight 10.5#		Internal Diameter 4.000			Set at 3266'		Perforations 3197'		то 3212'		e :		
Tubing Size Weight NONE					Internal C	Diameter		Set at Perforations				То	_			
Type Con Single (Type Fluid Production Dry Gas				Pump Unit or Traveling Plung Flowing					(No	
Producing Annulus		(Anr	nulus / Tubii	ng)		% C	arbon Di	ioxid	le		% Nitro	gen		Gas Gi .6	ravity -	G _o
Vertical D 3287'	epth(H	•						ress ang	ure Taps J O					(Meter 2"	Run) (P	rover) Size
Pressure	Buildup	o : :	Shut in 2-	3		20 10 at 1:00 (A								1:15		(AM) (PM)
Well on L	ine:	1	Started 2-4	1	2	0 10 _{at} 1	:15		(AM)(PM)	Taken 2-	-5 	20	10 _a	2:00		(AM) PM)
							OBSER	VE	SURFAC				Duratio	on of Shut	_{-in} 72	Hours
Static / Dynamic Property	ynamic Size		Meter Prover Pressure		Pressure Differential in Inches H ₂ 0	erential Flowing Well Temperature Temperature				Tubing Wellhead Pressure (P _w) or (P _t) or (P _c) psig psia		Duration (Hours)			id Produced Barrels)	
Shut-In									47	61.4	7					
Flow									35	49.4			72		0	
			Circle one:	<u> </u>			FLOW S	TRI	EAM ATTR	IBUTES		ı				
Plate Coefficcient (F _b) (F _p) Mcfd					Press Extension	Grav Fact	tor Ten		Flowing emperature Factor F ₁₁	Fa	riation actor F _{pv}	Metered Flow R (Mcfd)		v GOR (Cubic Feet Barrel)		Flowing Fluid Gravity G _m
												24				
						(OPEN FL	OW) (DEI	LIVE		•)2 = 0.2	207
(P _c) ² =	Т	•	(P _w) ²		ose formula 1 or 2	P _d =		<u></u> %	ſ	P _c - 14.4) +		:		(P _d))² = T	
$(P_c)^2 \cdot (P_a)^2$ or $(P_c)^2 \cdot (P_d)^2$		(P _e) ² · (P _w) ²		;	1. P ² -P ² LOG of formula 2. P ² -P ² 1. or 2.		P.2 - P.2	Backpressure Curve Slope = "n"or		n x LOG		Antilog		De Equal:	Open Flow Deliverability Equals R x Antilog (McId)	
Open Flo	L w				Mcfd @ 14.	65 psia			Deliverat	oility			Mcfd @	14.65 ps	ia	
		gned	authority,	on b	ehalf of the	Company, s	states tha	t he		uthorized t		he above repo		•	as know	•
he facts s	tated th	nerei	n, and that s	said	report is true	e and correc	t. Execu	ted 1	this the 1	6	day of . ^C	December	-/	- م م		20 10 .
			Witness	(il an	у)			_	-)au	<u>MUU</u>	Company	KANSAS	SER ROTRO	AHON COMMIS
			For Corr	missk	on						· · ·	Che	ked by	<u>-</u> -j	AN 2	6 2011

exempt status and that the focorrect to the of equipment in thereby re	under penalty of perjury under the laws of the state of Kansas that I am authorized to request under Rule K.A.R. 82-3-304 on behalf of the operator Rosewood Resources, Inc. pregoing pressure information and statements contained on this application form are true and best of my knowledge and belief based upon available production summaries and lease records installation and/or upon type of completion or upon use being made of the gas well herein named. Equest a one-year exemption from open flow testing for the G. Ihrig 21-20H e grounds that said well:
l further a	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 gree to supply to the best of my ability any and all supporting documents deemed by Commission sary 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 signed and dated on the front side as though it was a verified report of annual test results. KANSAS CORPORATION COMMISSION

W2269 G. Ihrig 21-20H North Goodland Goodland None February-10

	Casing			Н	RS	REMARKS
DATE	PSI	STATIC	MCF	D	OWN	(Maximum length 110 characters)
2/1/2010	33	3 46		25	0	cd
2/2/2010	34	47		8	22	
2/3/2010	47	7 60	i	0	24	
2/4/2010	49	62		0	24	
2/5/2010	35	5 48		28	0	
2/6/2010	33	3 46	:	26	1.5	
2/7/2010	32	2 45		26	1	
2/8/2010	32	2 45	:	25	0	
2/9/2010	32	2 45	:	22	18	
2/10/2010	33	3 46	į	6	24	
2/11/2010	47	7 60	ı	0	24	
2/12/2010	36	5 49	i	7	15	
2/13/2010	4() 53		0	24	
2/14/2010	37	7 50	ļ	16	12	
2/15/2010	3.5	5 48		13	18	
2/16/2010	36	5 49	ı	12	8	
2/17/2010	35	48		28	8	
2/18/2010	34	47		25	8	
2/19/2010	33	3 46	;	23	6	
2/20/2010	33	3 46		24	5	
2/21/2010	32	2 45		24	0	
2/22/2010	32	2 45		23	0	
2/23/2010	31	44		24	1	
2/24/2010	31	44		25	0	
2/25/2010	31	44		25	1.5	
2/26/2010	31	44	. :	22	5.5	
2/27/2010	30) 43	:	25	1	
2/28/2010	30) 43	:	25	0	
3/1/2010	() 0	١	0	0	
3/2/2010	() (•	0	0	
3/3/2010	() (ļ.	0	0	

Total 507

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W2269
G. Ihrig 21-20H
North Goodland
Goodland
None
March-10

	Casing			HRS	REMARKS
DATE	PSI	STATIC	MCF	DOWN	(Maximum length 110 characters
3/1/2010	3	0 4:	3	25	0 bp
3/2/2010	3	0 4:	3	25	0
3/3/2010	3	0 43	3	24	0
3/4/2010	2	9 4:	2	24	0
3/5/2010	3	0 4:	3	18	0 cal
3/6/2010	2	9 4:	2	20	0
3/7/2010	2	9 4:	2	25	0
3/8/2010	2	9 4:	2	25	0
3/9/2010	2	8 4	1	25	0
3/10/2010	2	8 4	1	25	0
3/11/2010	2	8 4	1	25	0 bp
3/12/2010	2	8 4	1	24	0
3/13/2010	2	8 4	1	23	0
3/14/2010	2	8 4	1	23	0
3/15/2010	2	8 4	1	24	0
3/16/2010	2	7 4	0	24	0
3/17/2010	2	7 4	0	24	0
3/18/2010	2	7 4	0	24	0 bp
3/19/2010	2	7 4	0	24	0
3/20/2010	2	7 4	0	24	0
3/21/2010	2	7 4	0	23	0
3/22/2010	2	6 3	9	23	0
3/23/2010	2	6 3	9	23	0
3/24/2010	2	6 3	9	23	0 opened to 28mcf
3/25/2010	2	5 3	8	26	0
3/26/2010	2	5 3	8	26	0
3/27/2010	2	4 3	7	27	0
3/28/2010	2	4 3	7	26	0
3/29/2010	2	4 3	7	26	0
3/30/2010	2	4 3	7	26	0
3/31/2010	2	4 3	7	26	0

Total 750

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KANSAS CORPORATION COMMISSION

CONSERVATION DIVISION

WICHITA, KS

CONSERVATION DIVISION

WICHITA, KS