KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

6.18

Type Test		1	SK T		(See Instruc	ctions on Re	everse Side	9)				
Open Flow Test Date:				9:	API No. 15								
		oilty		,	2/4/201	0	•···		18	31-20458-01-	-00		
Company Rosewo		soui	rces, Inc.				Lease Manlov	/e			14-13	Well Number H	
County Location Sherman SWSW			Section 13				RNG (E/W) 39W			Acres Attributed 80			
Field Goodlan	nd					Reservoir Niobrara				athering Conn h Systems In			
Completion 11/18/20		te	821 F 1883 1944 1945 1945 1945 1945 1945 1945 1945 1945 1945 1945 1945 1945 19	M-) (1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 -	Plug Bac 3272'	k Total Dep	l Depth Packer Set at					**************************************	
Casing Size Weight 4 1/2" 10.5#			Internal (4.000	Diameter				forations 99'	то 3214'				
Tubing S NONE	ize		Weigh	it	Internal [nternal Diameter Set at Perforation					То		
Type Cor Single (Type Flui Dry Ga	d Productions	on		Pump t	Jnit or Traveling	g Plunger? Yes	No	
Producing	g Thru	(Anr	nulus / Tubin	g)	% C	Carbon Diox	kide		% Nitro	ogen	Gas G	ravity - G _g	
Annulus											.6		
Vertical D 3451'	Depth(l	H)			Pressure Taps Flange					(Meter Run) (Prover) Size 2"			
Pressure	Buildu	ıp:	Shut in 2-3	2	10 at 1	0:20	(AM) PM	Taken 2-	-4	20	10 _{at} 10:35	(AM) (PM)	
Well on L		•	Started 2-4		0 10 at 1			Taken 2-			10 at 11:20	_	
					1	OBSERVI	ED SURFAC	CE DATA			Duration of Shut	-in 72 Hours	
Static / Dynamic Property	Orif Siz (inch	ze	Circle one: Meter Prover Pressu psig (Pm)	Pressure Differential in Inches H ₂ 0	Flowing Temperature t	Well Head Temperature t	Wellhead (P _w) or (asing d Pressure (P _t) or (P _c)	(P _w)	Tubing nead Pressure or (P _t) or (P _c)	Duration (Hours)	Liquid Produced (Barrels)	
Shut-In			,,,,	2			psig	33.4	psig	psia			
Flow							14	28.4			72	0	
				1		FLOW ST	REAM ATTI	RIBUTES				···	
Plate Coeffiecient (F _b) (F _p) Mcfd		Circle one: Meter or Prover Pressure psia		Press Extension √ P _m x h	Fac	Gravity Factor F _g		Fa	riation actor - pv	Metered Flor R (Mcfd)	w GOR (Cubic Fo Barrel	eet/ Fluid Gravity	
										19			
					(OPEN FL	OW) (DELIV	VERABILIT	Y) CALCUL	ATIONS		(P)² = 0.207	
(P _c) ² =	and the same of the same	:	(P _w)² =	:	P _d =		.% ((P _c - 14.4) +	14.4 = _	<u> </u>) ² =	
(P _c) ² - (I		(P	(°c)2 - (Pw)2	Choose formula 1 or 2 1. $P_c^2 - P_a^2$ 2. $P_c^2 - P_d^2$ divided by: $P_c^2 - P_w^2$	LOG of formula 1. or 2. and divide	P _c ² ~ P _w ²	Sid A	essure Curve ope = "n" or ssigned dard Slope	n x	LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)	
											<u> </u>		
Open Flo				Mcfd @ 14.	.65 psia		Delivera	bility			Mcfd @ 14.65 ps	sia	
	····									*ha at			
				n behalf of the				16	day of	December	ort and that he h	, 20 10	
			Witness (if any)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-	Ces		Company	RECEIVED	
			For Comm	nission	<u></u>					Che	cked by	ISAS CORPORATION COMMIS	

JAN 26 2011

			,
			g.
exempt status un and that the fore correct to the bes of equipment inst	der Rule K.A.R. 82-3-30- going pressure informa It of my knowledge and I allation and/or upon type	4 on behalf of the operator Rost tion and statements contained belief based upon available pro	d on this application form are true and oduction summaries and lease records ing made of the gas well herein named.
gas well on the g	rounds that said well:		
_	is a coalbed methane is cycled on plunger li is a source of natural is on vacuum at the pr is not capable of produce to supply to the best of	ift due to water gas for injection into an oil reso resent time; KCC approval Doo ducing at a daily rate in excess	cket No of 250 mcf/D rting documents deemed by Commission
Date: 12/16/10			
		Signature:	istant

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 COMMISSION

JAN 26 2011

W2323 Manlove 14-13H North Goodland Goodland None February-10

ď

500

	Casing			HRS	REMARKS
DATE	PSI	STATIC	MCF	DOWN	(Maximum length 110 characters)
2/1/2010	10) 23	9	0	cd
2/2/2010	1	1 24	, 1	22	
2/3/2010	10	5 29) () 24	
2/4/2010	1	7 30) (24	
2/5/2010	1	4 27	22	2 0	ı
2/6/2010	1:	2 25	5 10	5 1.5	
2/7/2010	1	1 24	1:	5 1	
2/8/2010	1	23	3 1:	5 0	
2/9/2010	1	1 24	ļ (5 18	i i
2/10/2010	ļ	8 31	() 24	
2/11/2010	1	8 31	() 24	bp
2/12/2010	1:	9 32	2 () 15	
2/13/2010	1	9 32	2 () 24	
2/14/2010	2	0 33	3 () 12	
2/15/2010	2	0 33	3 () 18	
2/16/2010	2	0 33	3 (8 (1
2/17/2010	1	6 29) :	8	1
2/18/2010	. 1	5 28	3 1:	3 8	;
2/19/2010	1	5 28	3 1:	3 6	j
2/20/2010	1	3 26	5 13	8 5	;
2/21/2010	1	2 25	5 2:	2 0)
2/22/2010	1	0 23	3 2	1 0)
2/23/2010		9 22	2 2	0 1	
2/24/2010		9 22	2 2	1 0)
2/25/2010	1	0 23	3 1	8 1.5	5
2/26/2010	1	1 24	4 1:	2 5.5	5
2/27/2010	1	0 23	3 2	1 1	
2/28/2010		9 22	2 1	8 0)
3/1/2010	,	0 ()	0 0)
3/2/2010		0 (0	0 0)
3/3/2010		0	0	0 0	

Total 289

RECEIVED KANSAS CORPORATION COMMISSION

W2323 Manlove 14-13H North Goodland Goodland None March-10

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

Total 481

RECEIVED KANSAS CORPORATION COMMISSION

JAN 26 2011