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

Type Tes	st:				(	See Instru	ctions on Re	verse Side	9)					
Open Flow  ✓ Deliverabilty					Test Date: API No. 15									
✓ D	eliveral	bilty			12/1/20				15-	199-20355	1000			
Compan Raven I		rces	s, LLC				Lease Agnew				#2-23	Well Nu	mber	
County Location Wallace County NE/4 NW/4			Section 23				RNG (E 42W	/W)	Acres Attributed					
Field						Reservoir Niobrara			Gas Gathering Connection Closed gathering system (West Kansas Pipeline)					
Complete 8/2008	ion Da	te			Plug Bac 1233.66	k Total Dep S'	pth		Packer S	Set at	· · · · · · · · · · · · · · · · · · ·		<u> </u>	
Casing Size 4 1/2"		Weight 10.5		Internal Diameter		Set at 1275.64'		Perforations 1070' - 1090'		То				
Tubing Size Weight 2 3/8 4.7		nt	Internal Diameter					rations	То					
Type Cor		n (D	escribe)		Type Flui	d Production			Pump Ui	nit or Traveling	Plunger? Yes	/ No		
Producin	g Thru	(An	nulus / Tubin	g)	% C	Carbon Diox	kide		% Nitrog	jen	Gas Gra	avity - G	 ì,	
Tubing Vertical I		1)				D				<del>-</del> · · · · · · · · · · · · · · · · · · ·				
1292'	Jepin(r					Pre	ssure Taps				.500"	Hun) (Pr	over) Size	
Pressure	Buildu	ıp:	Shut in 12-	12	0 09 at 9	:30 am	_ (AM) (PM)	Taken_12	2-2	20	09 at 9:30 at	<u>m</u> (/	AM) (PM)	
Well on I	_ine:		Started 12-		0 <u>09</u> at <u>9</u>	:30 am	_ (AM) (PM)	Taken 12	2-3	20	09 at 9:30 ar	<u>m</u> (/	AM) (PM)	
						OBSERVI	ED SURFACE	DATA			Duration of Shut-i	<sub>in_</sub> 24	Hours	
Static / Dynamic Property	Orifi Siz (inch	:e	Circle one:  Meter Prover Pressi		Flowing Temperature t	Well Head Temperature t	Casi Wellhead (P <sub>w</sub> ) or (P	Pressure	Wellhe	fubing ad Pressure r (P <sub>t</sub> ) or (P <sub>c</sub> )	Duration (Hours)	1	Produced	
Shut-In	.500	)"	psig (Pm)	Inches H <sub>2</sub> 0			psig 4	psia	psig 4	psia	24	0		
Flow	.500	)"	15	2			2 .		2		24	0		
	- 1			1		FLOW ST	REAM ATTRI	BUTES			<del></del>			
Plate Coeffied (F <sub>b</sub> ) (F	ient ,)	Pro	Circle one: Meter or over Pressure psia	Press Extension P <sub>m</sub> xh	Grav Fact	or	Flowing Temperature Factor F <sub>11</sub>	Fa	ation ctor pv	Metered Flow R (Mcfd)	y GOR (Cubic Fee Barrel)	et/	Flowing Fluid Gravity G <sub>m</sub>	
(D \2			(D. )2 .		•	, ,	VERABILITY)				•	= 0.20	)7	
(P <sub>c</sub> ) <sup>2</sup> =				Choose formula 1 or 2	P <sub>d</sub> =			c - 14.4) +	14.4 =	: :	(P <sub>d</sub> ) <sup>2</sup>			
(P <sub>c</sub> ) <sup>2</sup> - ( or (P <sub>c</sub> ) <sup>2</sup> - (	٠ i	(F	P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	<ol> <li>P<sub>c</sub><sup>2</sup> - P<sub>a</sub><sup>2</sup></li> <li>P<sub>c</sub><sup>2</sup> - P<sub>d</sub><sup>2</sup></li> <li>divided by: P<sub>c</sub><sup>2</sup> - P<sub>w</sub><sup>2</sup></li> </ol>	LOG of formula 1. or 2. and divide by:	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	Slop	e = "n" or signed ard Slope	nxl	og	Antilog	Deliv Equals	en Flow verability R x Antilog Mcfd)	
				<del>-</del>						`				
Open Flo	w			Mcfd @ 14.	65 psia		Deliverabi	lity			Mcfd @ 14.65 psia	a		
											rt and that he has		_	
ino idulo S	iaieu II	ıerel	ii, aiiu mat Sa	uu report is true	anu correct			(	uay of			, 2	v	
	<del></del> .		Witness (i	any)	KA	M <del>SAS CO</del> RP	ECEIVED ORATION COM	MISSION	· · · · · · · · · · · · · · · · · · ·	For C	ompany			
			For Comm	ission		MAY	<b>20</b> 20 <del>1</del> 1	0		Chec	ked by	1	·-··-	

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

Type Test	k:				Ċ	See Instruct	ions on Rei	verse Side	<del>=</del> )					
Op	en Flo	ń							t.,.					
Deliverability			Test Date	<b>:</b>			API	No. 15		10 m				
Company	,			***************************************	<del> </del>		Lease	<del></del>		<del></del>		Wall N	umber	
	·			age of the second			Sane	cu					23	
County	CERTAIN SA	, m.	Locatio	)N	Section	<del>and a stain a special charter and a</del>	TWP	विकित्रका सम्बद्धाः	RNG (E/W)				Attributed	
Walla Field	ce				23	23			421	1				
Freld					Reservol		•		Gas Gat	hering Conne	ection			
	s, a contraction	in main	ranger gerbangster i vir de jelevi sijet i some over sy	to y chiphodram copyrim mecanical garden	Nicob		Andrews were supplement			r ranco q s'antecentra e ranco compressora e com	nismo, and appropriations	in change publication of transformer.	sergereas proc *	
Completi						k Total Dept	h		Packer 8	Set at				
マーア Casing S	-08		Weight			3.66'		*	Perio	monte de la companie				
					Internal Diameter		Set at 127514'		LAIN	I EU UP IS		To		
Tubing S	ize		/0. 5 Weight		Internal Diameter		1275.64' Set at		Perlo	rations	70' = 1090'			
23/3			47		processing State Co.		INKA 56"			PRINTING	,,			
Type Cor	noletion	(Ós	escribe)		Type Flui	d Production	1000	, /0	Pump Ur	nif or Traveling	Plunger?	Yes // Not	Companies Compan	
20	~~		4	7					<b>,</b>			<u> </u>	r 	
Producing	g Thru	(Anr	nulus / Tubing	)	% C	arbon Dioxid	de		% Nitrog	<b>en</b>	Gas	s Gravity -	G_	
Buch	· win		, -	•		•							<b>30</b>	
Vertical C	)epin(H	)	riferantismi i questi un ran destri se 2007	(SPACE BIL) - Opening generalization of the constitution is		Press	sure Taps		·	The second s	(Me	ter Run) (F	Prover) Size	
	وجورها عستا	יייא דנוגרט		<u>'Z-/</u> 2		A. 2A			20 · ·			- intertain in the statement		
Pressure	Buildu													
Welt on L	ins:	!	Started	<b>2-2</b> 2	0' <i>09</i> at	9:30	(M9) (PM)	Taken	12-3	20	09 at _9.	.30	(EM) (PM)	
	سب باوينوو								* .					
						OBSERVE	D SURFACI	E DATA			Duration of S	ihut-in <u>é</u>	24 Hour	
Static /	Orifi	¢e	Circly and:	Pressure	Flowing	Well Head	מווועסמו אומסמווטאו		Tubing Weilhead Pressure (P <sub>a</sub> ) or (P <sub>c</sub> )		Physiothera	0.300	dal Thomas at	
Dynamic	Siz		(Meter) Prover Pressu	Differential re in	Temperature	Temperature					Duration (Hours)		Liquid Produced (Barrels)	
Property	(inch	85)	psig (Pm)	Inches H <sub>p</sub> 0	t		psig	psia	psig	psia p				
Shut-In	.50	20	14	0			4		4		24		0	
	.50	****	15				2		2		24		0	
Flow		U	/3	2	:	<u> </u>					<i>-7</i>			
		Calculation				FLOW STR	EAM ATTR	BUTES	<del></del>			The second section		
Plate	•		Circle one:	Press	Gra	vitiv	Flowing	Des	viation	Metered Floy	v G	OR RO	Flowing	
Coeffic		D.	Motor or ever Pressure	Extension	Fac	nas 7	Factor		sctor	R		tc Feet/	Fluid Gravity	
(F <sub>b</sub> ) (F		7.70	psia	₹ P <sub>#</sub> x:h	F	ç	Fis		F <sub>pv</sub>	(Mcfd)	Be	arrei)	G	
						*******						Proportion of the last section of the last sec	1	
Markov Communication Andrews				MARKON MARKATON CO.									1	
					(OPEN FL	OW) (DELLY	ERABILITY	) CALCUI	LATIONS			$(P_n)^2 = 0.$	207	
(P <sub>.</sub> ) <sup>2</sup> =		:	(P <sub>*</sub> ) <sup>2</sup> =			-	% (F	- 14.4) +	14.4 =	:		(P <sub>a</sub> ) <sup>2</sup> =		
				Choose terrosta 1 or 2	2	r-0 000	Backpre	ssure Curvi	3	F 7		,	Open Flow	
(P <sub>c</sub> ) <sup>2</sup> - (	(P <sub>0</sub> )*	(F	)²-(P <sub>a</sub> )²	1. P. P.	LOG of		Sto	pe = "⊓" - cr	n x	LOG	AnlEog	- *	eliverability	
or (₽_)²- (	[P_]2			2. P. 2. P. 2	1. cr 2. and alvide	P.2. P.2.	As	signed	"		isitoog	Eque	ils A x Antilog	
				dividual by: $P_c^2$ - $P_a$		L° '-	Stand	ard Slope		L .1	-		(Mcld)	
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Open Flo	w			Mofd @ 14	.65 psia		Deliverat	oility			Mcfd @ 14.6	5 psia		
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he facts	stated t	herei	in, and that sa	ild report is tru	e and corre	t. Executed	this the	14	day of	May_	manufacture of the second of t	g in the grant	, 20 <i>[D</i>	
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	الاستعداد م	بيد در در	Witness fi	lons	erienta de la composição	· · · · · · · · · · · · · · · · · · ·			Xu		Company	<b>T</b>	*** * · · · · · · · · · · · · · · · · ·	
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MAY 20 2010

	der 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 Raven Resources, LLC
	going pressure information and statements contained on this application form are true and
correct to the bes	st of my knowledge and belief based upon available production summaries and lease records
of equipment inst	allation and/or upon type of completion or upon use being made of the gas well herein named.
I hereby requ	lest a one-year exemption from open flow testing for the Agnew 2-23
gas well on the g	rounds that said well:
(Chec	k 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.
<b>✓</b>	is not capable of producing at a daily rate in excess of 250 mcf/D
I further agre	e to supply to the best of my ability any and all supporting documents deemed by Commission
staff as necessa	y to corroborate this claim for exemption from testing.
Date: 5/18/	
A:3	Signature: Audion Division  AVATION DIVISION  AVAITOR DIVISION  AVAITOR DIVISION

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.