KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Tes	t:				(See Instruc	tions on Rev	erse Side	9)				
= :	en Flo				Test Date	ə:			APi	No. 15			
<u>√</u> De	eliverat	oilty							15-	199-20355	<u>- 0000</u>)	
Company Raven F		rces	, LLC				Lease Agnew				#2-23	Well Number	
County Location Wallace County NE/4 NW/4			Section 23		TWP 11S		RNG (E 42W	W)	Acres Attributed				
Field	•				Reservoir Niobrara				Gas Gat	(ansas Pipeline)			
Completic 8/2008	on Dat	0		· · · · · · · · · · · · · · · · · · ·	Plug Bac 1233.66	k Total Dept	th		Packer \$		· · · · · · · · · · · · · · · · · · ·		
Casing Size			Weigh	nt	Internat [Diameter	Set at 1275.64'			rations 0' - 1090'	То		
Tubing Size 2 3/8			Weigh	nt	Internal 6	Diameter	Set at 1060.56'			rations	То		
Type Cor CO2 Fr			escribe)		Type Flui Only G	d Production				nit or Traveling	Plunger? Yes	No	
			e Gas rulus / Tubin	n\		arbon Dioxi	do		No % Nitrog	100	Goo G	ravity - G	
Tubing	y ma	(741)	TOTOS / TODIN	9/	76 C	AIDON DIOXI	u o		76 IVIIIOS	jen	Gas G	ravity - G _g	
Vertical C	Depth(H	f)		 .	,	Pres	sure Taps		<u> </u>		(Meter	Run) (Prover) Size	
1292'							_				.500"		
Pressure	Buildu		Shut in 9/2		11 at 1	1	(AM) (PM)				11 at 10 am	(
Well on L	ine:		Started 9/2	72	0 <u>11</u> at <u>1</u>	0 am	(AM)(PM)	Taken 9/	28	20	11 at 10 am	(AM) (PM)	
						OBSERVE	D SURFACE	DATA			Duration of Shut	-in 24 Hours	
Static / Dynamic	Orifi Siz	0	Circle ane: Meter Prover Pressi	Pressure Differential in	Differential Temperature Tempera		Wellhead Prescure		Tubing Wellhead Pressure (P _w) or (P ₁) or (P ₂)		Duration (Hours)	Liquid Produced (Barrels)	
Property	(inch	psig (Pm)		Inches H ₂ 0	t	1	psig	psia	psig	psia			
	Shut-In .500"						9		9		24	0	
Flow	.500)" ——			<u> </u>		5		5		24	0	
	1			l	<u> </u>	FLOW STR	EAM ATTRI	BUTES				 _	
Plate Coefflecient (F _b) (F _p) Mcfd		Circle one: Meter or Prover Pressure psia		Press Extension P _m x h	Extension Factor		Temperature Fa		viation Metered lactor R F _{pv} (McId		GOR	Flowing Fluid Gravity G	
											NOV 1 4 2011		
					-	OW) (DELIV	ERABILITY)			<u>-</u>	KCC yy	ICHITA	
(P _e)² =		=	(P _w) ² =	Choose formula 1 or 2	P _a =		% (P,	, - 14.4) +	14.4 = _	;	(P _d)	kārit M	
(P _a)² - (I or (P _a)² - (I	P _a) ² P _a) ²	(P _e) ² - (P _w) ²		1. P ₀ ² · P ₀ ² 2. P ₀ ² · P ₀ ² divided by: P ₀ ² · P ₀ ²	LOG of formula 1. or 2. and divide	P.2. P.2	Backpressure Cur Slope = "n"or Assigned Standard Slope		n x l	LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)	
				·									
							<u> </u>						
Open Flor	w			Mcfd @ 14.	65 psla		Deliverabil	ity	•••		Mcfd @ 14.65 ps	ia	
		-	_	n behalf of the				ia H.	make the	above repo	rt and that he ha	as knowledge of	
<u> </u>			Witness (i	fany)			-		<u>-/-</u>	A) c	ompany .		
			For Comm	ission			_		•	Chec	ked by		

exempt status un and that the fore correct to the bea of equipment ins	ader 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 Raven Resources, LLC egoing pressure information and statements contained on this application form are true and est of my knowledge and belief based upon available production summaries and lease records stallation and/or upon type of completion or upon use being made of the gas well herein named.
	uest a one-year exemption from open flow testing for the <u>Agnew 2-23</u> grounds that said well:
I further agre	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 ee to supply to the best of my ability any and all supporting documents deemed by Commission to corroborate this claim for exemption from testing.
Date:	RECEIVED NOV 1 4 2011 KCC WICHITA Signature: Managing Member

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.

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Tes	t:				((See Instruc	tions on Rev	erse Side)					
☐ op	en Flo	w			Test Date				A D1	No. 45				
√ De	sliverat	oilty			iesi Dali	ə.				No. 15 199-20355				
Company Raven F		rces	s, LLC		,		Lease Agnew					/ #2-23	Vell Numi	ber
County Wallace County		Locat NE/4 N		Section 23				RNG (E/ 42W	W)		Acres Attributed			
Field					Reservoi Niobrara					hering Conni gathering s		Vest Ka	ansas P	ipeline)
Completic 8/2008	Completion Date Plug Back Total Depth Packer Set at 8/2008 1233.66'		et at				960							
Casing Size 4 1/2"			Weigh 10.5		Internal Diameter		Set at 1275.64'			rations 0' - 1090'		То	NOL	PHIZ.
Tubing Si 2 3/8	ize		Weigh 4.7	t	Internal (Diameter	Set at 1060		Perfo	rations	•	TO 40	ን.	20
Type Con	npletio	n (D			Type Flui	d Production			Pump Ur	it or Traveling	Plunger?	Yes /	NOVI	<i><u)< i=""></u)<></i>
CO2 Fr	ac								No				··· /(1//2
	g Thru	(An	nulus / Tubin	3)	% C	Carbon Dioxi	de		% Nitrog	en	(Gas Gra	vity - G	-74
Tubing Vertical C)enth(l	4)				Proc	sure Taps					Motor P	un) (Prov	var) Siza
1292'										······		.500"	.uii) (Fio	
Pressure	Buildu			62									(Al	И) (PM)
Well on L	ine:		Started 9/2	72	o <u>11</u> at	0 am	(AM) (PM)	Taken <u>9</u> /2	28	20	11 at 1	0 am	(AI	и) (PM)
				<u>. </u>		OBSERVE	D SURFACE	DATA			Duration o	of Shut-ir	24	Hours
Static /	Orifi	ice	Circle ane: Meter	Pressure Olfferential	Flowing	Well Head	Casir Wellhead F	•	1	ubing ad Pressure	Durati	•	Liquid Produced (Barrels)	
Dynamic Property	Siz (inch		Prover Pressi psig (Pm)		Temperature t	Temperature t	(P _w) or (P _t			(P _i) or (P _c)	(Hour			
Shut-In	.500)"					9		9	1	24		0	
Flow	.500)" 					5		5		24		0	
						FLOW STR	REAM ATTRI	BUTES		·	- ,			
Coeffied (F _b) (F	Plate Coefficient (F _b) (F _p) Mcfd		Circle one: Meter or over Pressure psia	Press Extension P _m xh	Gravity Factor F ₉		Flowing Femperature Factor F _{rt}	emperature Factor F		ctor R		GOR Cubic Fee Barrel)	v	Flowing Fluid Gravity G _m
(0.)1			45.32		•		ERABILITY)						= 0.207	
(P _c) ² =		<u>-</u> :	(P _w) ² =	Choose formula 1 or 2	P _a =		1	- 14.4) +		 ;		(P _d) ²		
(P _e) ² - (F or (P _e) ² - (F		(F	P _e)²- (P _w)²	1. P _c ² ·P _a ² 2. P _c ² ·P _d ² dMdod by: P _c ² ·P _d ²	LOG of formula 1. or 2. and divide by:	P _c ² - P _* ²	Slope	sure Curve e = "n" or igned rd Slope	nxl	.og _	Antilo	ng	Delive Equals R	Flow rability x Antilog ofd)
				27 G . W										
Open Flor	w			Mcfd @ 14.	65 psla		Deliverabil	ity		l	Victor @ 14	.65 psia		
		-	•	n behalf of the				horized to		. /	t and that	t he has		lge of
			Witness (i	any)			•	~	_	For C	ompany			_
			For Comm	ission				_		Chec	ked by			

penalty of perjury under the laws of the state of Kansas that I am authorized to request Rule K.A.R. 82-3-304 on behalf of the operator Raven Resources, LLC
ing pressure information and statements contained on this application form are true and my knowledge and belief based upon available production summaries and lease records ation and/or upon type of completion or upon use being made of the gas well herein named. It a one-year exemption from open flow testing for the Agnew 2-23 ands that said well:
s a coalbed methane producer s cycled on plunger lift due to water s a source of natural gas for injection into an oil reservoir undergoing ER s on vacuum at the present time; KCC approval Docket No
o supply to the best of my ability any and all supporting documents deemed by Commissio
Signature: My Menulus Title: Mg. Menulus

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.

Form G-2 (Rev. 7/03)

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test	:					6	See Instruct	ions on Re	verse Side	9)						
C Op	en Flo	W				T4 D-4-				40	No. 16					
☐ De	livorab	ilty				Test Date):			API	No. 15					
Company								Lease					We	ll Num	ber	
							A	9 NCL					3-23			
County Location					Section	C	TWP		RNG (E	(W)		Acres Attributed				
Field						Reservoir				Goe Go	thering Conn	ection		 -		
risiu						LIGSGLACK				G85 G8	aiding Com			A.	^	
Completic	n Dat	8		-		Plug Bac	k Total Dept	h	*****	Packer :	Set at			- 4	CA	
														0,	·/E	
Casing Si	Z 0		Welg	ht		Internal C	Diameter	Set a	at	Perfo	orations	Ţ	to	- 4	4 2	
Tubing Si	 70		Weig	ht		Internal E)iameter	Set a	<u></u>	Perto	anoltar	Т	. 'U'	111	CEIVE 2011	
.oomg o							-,0,,,,,,,,,,	05.		,			•	"C	4,	
Турв Сол	npletio	ı (De	scribe)			Type Flui	d Production	n		Pump U	nit or Traveling	g Plunger?	Yes /	No	"/4	
		·											Sas Gravi	- G		
Producing) Thru	(Anr	ulus / Tubir	ig)		% C	arbon Dioxi	de		% Nitro	jen	· ·	sas Gravi	.у - G _e		
Vertical D	enth(F	<u> </u>					Pres	sure Taps	32.2			(I	Meter Rur	ı) (Pro	ver) Size	
10.1100.		••						outo tupo				•			·	
0	Outlates			10	1	o ti a	/Alma	(444) (514)	Tolona	9/27	20	11 0 4	(12)	/Δ	M) (PM)	
Pressure																
Well on L	lne:		Started7	/2	7 2	0 	10:00	(AM) (PM)	Taken	7/24	20	11 81 _A	<u>(0:00</u> _	(<u>A</u>	<u>M)</u> (PM)	
						, <u>, , , , , , , , , , , , , , , , , , </u>	ORSERVE	D SURFAC	E DATA			Duration of	f Shut-in	24	Hours	
	0=4		Circle one		Pressure	—		Ces		T	Tubing	1				
Static / Dynamic		Orifice Mote				Flowing Wall Hand Temperature Temperatur		I Weilbeed Pressure		Wellhead Pressure (P_) or (P _c) or (P _c)		Duratio (Hours			Liquid Produced (Barrels)	
Property	(inch	es)	psig (Pm)		In Inches H₃0	t	t	Peto P	paie	peig	t (L ^s) or (L ^s)	- "		,	.	
Shut-In								ς		9	1	24		0		
Flow			†					 		5		 		0		
			_ 	!			<u> </u>	5		<u></u>		24				
	 -r			1			FLOW STR	EAM ATTR	IBUTES		1				et e e e	
Plate Coeffied			Oirele une: Mater or	1	Press Extension	Grav Fact		Flowing Semperature		ristion	Metered Flo		GOR Subtic Feet/		Flowing Fluid	
(F _b) (F	.)	Prover Pressure		1	√ P _{axh}	Fac		Factor		ictor F _{pv}	(Mcfd)	Barrel)		Gravity G		
Mctd			psin					F _n						\dashv		
				丄						···						
						(OPEN FL	OW) (DELIV	ERABILITY) CALCUL	ATIONS			(P _a) ² =	0.20	7	
(P,)*=.		:	(P _w) ² :	<u></u>	:	P _d =		% (I	² - 14.4) ⊀	14.4 =	<u>:</u>		(P _d) ² =			
(P _a)2- (I	, ₁	(P _e) ¹ - (P _e) ¹			ose formute 1 or 2	LOG of	$\overline{\Gamma}$	Backpressure Curve		• []				Open Flow		
or	·	Ţ	a, . (, *)		2. P - P -	formula 1. or 2.	[or pe = "n"	_ пк	rog	Antilo	9		erebility R x Antilog	
(P _e)²- (I	P _a)²		1		ed by P. P.	and divide	P.* P.*		signed lard Slope		.			-	tcfd)	
												1				
						 -					·	 				
						<u> </u>	-			<u></u> .		<u> </u>				
Open Flo	w				Mcfd @ 14.	65 psia		Deliverat	ility			McId @ 14	.65 psia			
The	erebnu	laneo	authority.	n b	ehalf of the	Company s	states that h	e is dulv a	uthorized 1	to make t	he above rep	ort and that	he has l	knowle	dge of	
)	
ne recis 6	raidu (191B)	न, साधा गिस्री है	Uise	report is true	atiu Collec	. Executed	UIS (IB)		Caty UI						
												2::::				
			Witness	(ii en	y)						For	Company				
···			For Com	missk	en .			-			Chi	ocked by				

exempt status and that the fo correct to the to of equipment i	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 Rause Resources LLC pregoing pressure information and statements contained on this application form are true and pest 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 Rayes 2-23
gas well on the	e grounds that said well:
[[[I 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 Commissions any to corroborate this claim for exemption from testing.
Date: <u>9/3</u>	7
	Signature: Signat

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