KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test	:				(See Instr	uctic	ons on Re	verse Side)					
	en Flow				Test Date) :				ΑP	l No. 15				
De	liverabilty	<i>'</i>			10/20/20	011				05	3-21128-000	0			
Company SAMUEL		JR. & ASSO	OCIATES, I	NC.				Lease FLEMIN	NG				1X-20	Well Nu	mber
County Location ELLSWORTH 2000' FSL & 2390' FEL				Section 20			1 5 /S 7V		RNG (E 7W	ING (E/W) W		Acres Attributed 320			
Field WILDCAT				Reservoir \wp GRAND HAVEN					Gas Gathering Connection AMERICAN ENERGIES						
Completion Date 2006				Plug Back Total Depth 1912					Packer Set at NONE			NOV 1 0 2			
Casing Size Weight 4.5 10.500			Internal Diameter 4.090			Set at 1958		_	Perforations 1844		т _о 1850	KCC WIC			
Tubing Si	ze	Welg	jht		Internal E	Diameter		Set	at	Perf	orations		То		YVIC I
Type Con		Describe)			Type Flui GAS	d Product	tion			Pump U YES	Init or Traveling	Plunger?	Yes	/ No	
Producing Thru (Annulus / Tubing)				% Carbon Dioxide					% Nitrogen			Gas Gravity - G _g			
CASING				0.023					40.88	40.881 0.741					
Vertical D	epth(H)							ure Taps IGE				(Meter R	łun) (Pr	rover) Size
Pressure	Buildup:	Shut in 9/	19	20	11 _{at} 8	AM	_ ((AM) (PM)	Taken_10)/20	20	11 at 8	AM	(AM) (PM)
Well on L	ine:	Started		_ 20	at		_ ((AM) (PM)	Taken		20	at _		(AM) (PM)
						OBSER	VED	SURFAC		1		Duration o	of Shut-i	_{in_} 744	1 Hours
Static / Dynamic Property	Orifice Size (Inches) Prover Pressure psig (Pm) Inches H ₂ 0		lial 1	Flowing Well Head Temperature t			Casing Wellhead Pressure (P _w) or (P _t) or (P _c)		(P _*)	Tubing Wellhead Pressure (P _*) or (P ₁) or (P ₃)		Duration Lie (Hours)		d Produced Sarrels)	
Shut-In			,	20			\dashv	280	psia 294.7	psig	psia	744			
Flow															
			1			FLOW S	TRE	AM ATTR	IBUTES				<u>.</u>		
Plate Coeffieci (F _b) (F Mcfd	ient ,) f	Circle one Meter Of Prover Pressure psia	Press Extensi ✓ P _m >	on	Grav Fact F _c	tor	Flowing Temperature Factor F ₁₁		Fa	iation ctor	Metered Flo R (Mcfd)	(Cubic Fe		et/	Flowing Fluid Gravity G _a
					(OPEN FL	OW) (DEL	IVE	RABILITY) CALCUL	ATIONS	<u> </u>				
)² =	:	(P _w) ²	=	:	P _e =		_%	. (1	P _c - 14.4) +	14.4 = _	:		(P _d) ²	? = 0.20 ? =	
(P _a) ² - (F	P_)2	(P _c) ² - (P _w) ²	Choose formula 1. Pc - P 2. Pc - P divided by: Pc	5 5	LOG of formula 1. or 2. and divide by:	P,2. P,2]	Backpre Slo 	essure Curve pe = "n" - or ssigned tard Slope		roe [Antilo		Op Deli Equals	en Flow verability R x Antilog Mcfd)
			, <u>e</u>												
Open Flov	N		Mcfd @	14.6	5 psia			Deliverat	pility			Mcfd @ 14	1.65 psia	<u>a</u>	
		ed authority, or						-		•	nd above repo	ort and tha	t he has)	ledge of 20 11
		Witness	(if any)				-	-		7	For	ompany	7)		·
		For Core	mission	•••			-	-		j _	Che	cked by			

	f perjury under the laws of the state of Kansas R. 82-3-304 on behalf of the operator <u>SAMUEL</u>	•
	ure information and statements contained on th	
orrect to the best of my knowl	ledge and belief based upon available production	on summaries and lease records
• •	or upon type of completion or upon use being ma	_
I hereby request a one-year	ar exemption from open flow testing for the <u>FLE</u>	MING 1X-20
as well on the grounds that sa	aid well:	RECEIV
(Check one)		NOV 1 0
is a coalbed	d methane producer	KCC MIO
is cycled or	n plunger lift due to water	KCC WIC
is a source	of natural gas for injection into an oil reservoir o	undergoing ER
is on vacuu	um at the present time; KCC approval Docket No	•
✓ is not capal	able of producing at a daily rate in excess of 250) mcf/D
I further agree to supply to	o the best of my ability any and all supporting d	ocuments deemed by Commission
- ,,,,	rate this claim for exemption from testing.	•
ate: 11/7/2011		
	Signature:	X Am

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.