KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test	:: en Flo	w				(See Instru	uctio	ons on Re	verse Side	,					
= '	liverat					Test Date: API No. 15 01/13/2013 081-21402 ~ 0000										
Company		· () ب	perating	Inc		01110120			Lease Ellsaes	sser					Well No	ımber
Chesapeake Operating, Inc. County Location					Section T			TWP		RNG (E/W)			Acres Attributed			
Haskell SE SW NW				23 Reservoir			298				antion					
Field Lemon NE				Cheste		w	Gas Gathering Conne OneOk Energy Sen									
Completion Date 5/11/01				Plug Back 5620	k Total De	epth	ı	Packer Set at								
Casing S 5.5	asing Size Weight				Internal Diameter 4.950			Set at 5700		Perforations 4805			то 5369(ОА)			
Tubing Si	ubing Size			Weight			Internal Diameter		Set at			orations	To			
	2.875 6.5 Type Completion (Describe)					2.441 Type Fluid Production			5453		Pump Unit or Traveling Plu			lunger? Yes / No		
Comminded (Gas+Oil)					* *	Oil/Water					Pump Unit					
Producing Annulus	Thre	₹ Anı	nulus / Tubin	ıg)		% C	arbon Did	oxid	le		% Nitrog	gen		Gas Gr	avity -	G_g
Vertical D		1)					Pr	ess	ure Taps					(Meter I	Run) (F	rover) Size
5700				/4.0		10 7	.00						40	7.00		
Pressure	Buildu	p:	Shut in	/12	2	0_13_at_7	.00	_	(AM) (PM)	Taken_01	1/13	20	<u>13</u>	at		(AM) (PM)
Well on L	ine:		Started		20	0 at			(AM) (PM)	Taken		20		at		(AM) (PM)
							OBSER	VE	SURFAC	E DATA			Dura	tion of Shut-	in 24	Hour
Static / Orific Dynamic Size Property (inche			Meter		Pressure Differential	Flowing	Well Head		Casing Wellhead Pressure		Tubing Wellhead Pressure		Duration		Liquid Produced	
		re Prover Pres		sure in		Temperature t	Temperature t		(P_w) or (P_t) or (P_c)		(P_w) or (P_t) or (P_c)		(Hours)		(Barrels)	
Shut-In			poig (/ III)		110100 1120			_	psig 35	psia 49.4	psig 16	30.4		24		***
Flow											1	0011				
			L	1			FLOW S	TRE	EAM ATTR	BUTES	<u> </u>				.1	
Plate			Circle one:	Τ	Press	Grav			Flowing		iation	Metered Flov		GOR		Flowing
	Coeffiecient (F _b) (F _p)		Meter or rover Pressure		Extension	Fact	or	Temperat Factor		ature Fact		ctor R		(Cubic Fee		Fluid Gravity
11-5-4	Mcfd		psia		√ P _m xh	F.			F _{ft}		pv	(Mcfd)		Barrel)		G _m
														····		
						(OPEN FL				•					² = 0.2	207
P _c) ² =		_:	(P _w) ² =		se formula 1 or 2:			%	ľ.	P _c - 14.4) +	-1	:		(P _d)	² =	
$(P_c)^2 - (P_a)^2$		(F	$(P_c)^2 - (P_w)^2$. P _c ² -P _a ²	LOG of formula			Backpressure Curve Slope = "n"			LOG	Antilog	Antiloa	1	pen Flow liverability
or $(P_c)^2 - (P_d)^2$					2. P _c ² - P _d ² ed by: P _c ² - P _w ²	1. or 2. and divide by: p ₂ - P _w		1 1		signed				Antilog	Equals R x Antilog (Mcfd)	
				0,7,00	00 by. 1 c 1 w											
Open Flor	l w				Mcfd @ 14.	1 65 nsia			Deliverat	nility	L		Mofd	@ 14.65 psi	l	
		iana	1 authority -			•	tatas the	. h			o males il	***				Jadaa -£
		-	•			•			•			he above repo une	rt and	o that he ha		
ne racts si	tated t	nerei	n, and that s	ald r	report is true	and correc	t. Execut	ed 1	this the		day of			_		20 <u>13</u> .
			Witness	(if any	1				-			For C	ompan	v		WICH
									_						11.11	. 0 1 20
			For Com	missio	n							Chec	ked by			-
															R	ECEIVE

	er penalty of perjury under the laws of the state of Kansas that I am authorized to request er Rule K.A.R. 82-3-304 on behalf of the operator Chesapeake Operating, Inc.
and that the foreg	oing pressure information and statements contained on this application form are true and
correct to the best	of my knowledge and belief based upon available production summaries and lease records
• •	llation and/or upon type of completion or upon use being made of the gas well herein named. st a one-year exemption from open flow testing for the Ellsaesser 2-23
	ounds that said well:
(Check	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.
✓	is not capable of producing at a daily rate in excess of 250 mcf/D
_	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: 06/26/2013	
	Signature: Lichardson, Regulatory Technician III

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.

JUL 0 1 2013