KCC WICHITA

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

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Type Test:			(	See Instruct	ions on Re	verse Side	9)				
Open Flow	1		Test Date	ı:			API	No. 15			
Deliverabili	ty		10/1/20	10			075	-20512~C			
Company Chesapeake	Operating, I	nc.			Lease St Col	umbans			2-12	Well Number	
County Hamilton	Locat	ion	Section 12		TWP 22S		RNG (EA	<b>V</b> )		Acres Attributed	
Field Bradshaw			Reservoir Winfiel					ering Conn Energy Ser			
Completion Date 4/21/1994			Plug Back 2780	k Total Dept	h 		Packer Sone	et at			
Casing Size 4.5			Internal Diameter 4.012		Set at <b>2880</b>		Perforations 2739		то <b>275</b> 5		
Tubing Size 2.375	Weigh 4.7	nt	Internal Diameter 1.995		Set at <b>2799</b>		Perforations		То		
Type Completion Single Gas	rpe Completion (Describe) ingle Gas		Type Fluid Production Water			Pump Unit or Traveling F Pump Unit					
Producing Thru ( Annulus	Annulus / Tubin	g)	% C	arbon Dioxid	de		% Nitroge	en	.761	avity - G <sub>g</sub>	
Vertical Depth(H) 5550				Press Flang	sure Taps ge				(Meter F 2.067	Run) (Prover) Siz	
Pressure Buildup	: Shut in	/1 20	10 at 7	:00	(AM) (PM)	Taken_1(	0/2	20	10 at 7:00	(AM) (PM)	
Well on Line:	Started	20	at		(AM) (PM)	Taken		20	at	(AM) (PM)	
				OBSERVE	D SURFAC	E DATA			Duration of Shut-	inHo	
Dynamic Size	ynamic Size Prover Pressure		Flowing Well Head Temperature t t		$(P_w)$ or $(P_t)$ or $(P_c)$		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> ) psig psia		Duration (Hours)	Liquid Produced (Barrels)	
Shut-In	psig (r)	Inches H <sub>2</sub> 0			psig 39	53.4	50	64.4	24		
Flow											
<del></del>				FLOW STR	EAM ATTE	RIBUTES					
Plate Coeffiecient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension √ P <sub>m</sub> x h	Grav Fac F	tor 1	Flowing Femperature Factor	Fa	riation actor = pv	Metered Flow R (Mcfd)	w GOR (Cubic Fe Barrel)	et/ Flowing Fluid Gravity G <sub>m</sub>	
								· · · · · · · · · · · · · · · · · · ·			
(P <sub>c</sub> ) <sup>2</sup> =	: (P)2:	= :	(OPEN FL	OW) (DELIV		/) CALCUL P <sub>c</sub> - 14.4) +		:	(P <sub>a</sub> ) <sup>;</sup> (P <sub>d</sub> );	<sup>2</sup> = 0.207 <sup>2</sup> =	
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	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 by:		Backpre Slo	essure Curve pe = "n" - or ssigned dard Slope	e n x l	og	Antilog	Open Flow Deliverability Equals R x Antile (Mcfd)	
Open Flow		Mcfd @ 14.6	5 psia		Deliveral	bility	L		Mcfd @ 14.65 psi	а	
	aned authority			states that h			o make th	e above repo	ort and that he ha	s knowledge of	
the facts stated th	•						day of N		· · · · · · · · · · · · · · · · · · ·	, 20 10	
	Witness	(if any)						For	Company	RECE	
	For Com	mission						Che	cked by	DEC 0	

exempt status und	er penalty of perjury under the laws of the state of Kansas that I am authorized to request ler Rule K.A.R. 82-3-304 on behalf of the operator Chesapeake Operating, Inc.
correct to the bes of equipment insta I hereby requ	poing pressure information and statements contained on this application form are true and of my knowledge and belief based upon available production summaries and lease records allation and/or upon type of completion or upon use being made of the gas well herein named. Sest a one-year exemption from open flow testing for the St Columbans 2-12 counds that said well:
	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 e to supply to the best of my ability any and all supporting documents deemed by Commission
staff as necessar Date: <u>November</u>	y to corroborate this claim for exemption from testing.  15, 2010
	Signature:

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.

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DEC 0 6 2010