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

_ :	: en Flov liverab				( Test Date		uctions on Re	everse Side	API	No. 15 023-20761-(	00-00		
Company		lno					Lease Rueb F					Well Num	ber
Noble Energy, Inc.  County Location				Section	<del></del>	TWP	TWP		/W)	Acres Attributed		ributed	
Cheyenr Field			NW-NV		16 Reservoi	r	38			thering Conn			
Cherry Creek Niobrara Gas Area				Niobrara	a 		Bittercreek Pipeline Packer Set at			)			
Completion Date 7/27/2007				1672'		pin	N/A						
-	Casing Size Weight 7", 4-1/2" 17#, 9.5#			Internal ( 9-7/8",			Set at 300', 1723'		rations 4'	то 1580'			
Tubing Size Weight N/A				Internal Diameter			et at Perforations			То			
Type Completion (Describe) Single (Gas)				Type Fluid Production Saltwater			Pump Unit or Traveling P Yes			Plunger? Yes / No			
Producing Thru (Annulus / Tubing) Annulus				% Carbon Dioxide			% Nitrogen			Gas Gravity - G <sub>9</sub>			
Vertical D		1)				Pre	essure Taps				(Meter	Run) (Prov	ver) Size
			3/2/		00 7	·10	<u></u>						<del></del>
Pressure	Buildu		Snut in	2	0 <u>09</u> at 7		$\boldsymbol{\varkappa}$				at		
Well on L	ine:		Started 3/3/	20	09 at 7	.20	_ <b>(</b> AM <b>)</b> (PM)	Taken		20	at	(Ai	M) (PM)
						OBSERV	ED SURFAC	E DATA			Duration of Shut-	<sub>in</sub> _24	Hours
Static / Dynamic Property	Dynamic Size		Circle one: Meter Prover Pressu: psig (Pm)	Pressure Differential in Inches H <sub>2</sub> 0	Flowing Temperature t	Well Head Temperatu t	Wellhead (P <sub>w</sub> ) or (I	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Tubing ead Pressure r (P <sub>1</sub> ) or (P <sub>c</sub> )	Duration (Hours)	Liquid Produced . (Barrels)	
Shut-In			paig (i iii)	mones 11 <sub>2</sub> 0			190	psia	psig	psia			
Flow													
						FLOW ST	REAM ATT	RIBUTES					
Plate Coeffiecient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd			Circle one:  Meter or  Prover Pressure psia  Press Extension  Pmxh		Gravity Factor F <sub>g</sub>		Flowing Temperature Factor / F <sub>II</sub>	Fa	iation ctor : pv	Metered Flov R (Mcfd)	v GOR (Cubic Fe Barrel)	et/	Flowing Fluid Gravity G <sub>m</sub>
	L				(OPEN EL	OW) (DEL	IVERABILITY	V) CALCUI	ATIONS			l	j
(P <sub>c</sub> ) <sup>2</sup> =		_:	(P <sub>w</sub> ) <sup>2</sup> =_	:	$P_d = 1$			P <sub>c</sub> - 14.4) +		:	(P <sub>a</sub> ) (P <sub>d</sub> )	2 = 0.207 2 =	<u> </u>
$(P_c)^2 - (P_a)^2$ 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:	formula 1. or 2.  and divide p2.p2		Backpressure Curve Slope = "n" or Assigned Standard Slope		LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)	
······································													
Open Flov	Open Flow Mcfd @ 14.65 psia					Deliveral	bility	I	Mcfd @ 14.65 psia				
The u	ındersi	-	-		Company, s		he is duly a	uthorized to	o make th	ne above repo	rt and that he ha	s knowled	dge of
	***************************************		Witness (if	any)				E	Zju	JOS For C	eph company	RE	CEIVE
			For Commi	ssion			-	(1	nn	Y Chec	cked by	AUC	312

	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 Noble Energy, Inc.
•	joing 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.
	est a one-year exemption from open flow testing for the Rueb Farm 11-16
as well on the gr	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
Ē	is on vacuum at the present time; KCC approval Docket No.
<b>7</b>	is not capable of producing at a daily rate in excess of 250 mcf/D
I further agree	e to supply to the best of my ability any and all supporting documents deemed by Commission
taff as necessan	to corroborate this claim for exemption from testing.
oate: 8/27/09	
	$\mathcal{L}_{\mathcal{L}}$
•	
	Signature: Thu Joseph
	Title: Regulatory Specialist

## 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.