KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:				(-	See Instruc	tions on Rev	verse Side	9)			
	en Flow verabilty			Test Date	: :				No. 15 023-20747-0	0-00	•
Company Noble Energy Inc			Lease Rueb Farm			arm			12-15	Well Number 12-15	
County Location Cheyenne SWNW			Section 15		TWP 3S			/W)	Acres Attributed		
Field Cherry Creek			Reservoir Niobrara					thering Conne Morgan	ction		
Completion Date 5/15/2007			Plug Back 1627'	k Total Dep	oth	Packer Set at		Set at			
Casing Size Weight 7", 4-1/2" 17#, 9.5#			Internal D 9-7/8",			Set at 304', 1674'		orations 1'	то 1547'		
Tubing Size Weight 2-3/8" 4.7#			ht	Internal C 1.995		Set a	Set at		orations	То	
Type Completion (Describe) Single (gas)			Type Fluid Production Saltwater			Pump Unit or Traveling Plung Yes Rod Pump			Plunger? (Yes	/ No	
Producing Thru (Annulus / Tubing) Tubing			g)	% Carbon Dioxide			% Nitrogen			Gas Gravity - G	
Vertical Depth(H)				Pressure Taps			(Meter Run) (Prover) Size				
Pressure B	Buildup:	Shut in 1/9) 20	13 at 1:	:35	. (AM) (PM)	Taken		20 .	at	(AM) (PM)
Well on Line:		Started 1/1	0 20	13 at 1:50		. (AM) (PM)	(AM) (PM) Taken		20	at	(AM) (PM)
				-	OBSERVE	ED SURFACI	E DATA			Duration of Shut	-in_24.5 Hours
Static / Orifice Dynamic Size Property (inches)		Circle one: Pressure Meter Differential Prover Pressure in psig (Pm) Inches H,0		Flowing Well Heat Temperature t		Wallhaad Praccura		Tubing Wellhead Pressure (P_w) or (P_t) or (P_c) psig psia		Duration (Hours)	Liquid Produced (Barrels)
Shut-In						64	para	parg	psiu		
Flow											
			1		FLOW ST	REAM ATTR	IBUTES				<u>-</u>
Plate Coefficient (F _b) (F _p) Mcfd		Circle one: Meter or over Pressure psia Press Extension P _m x h		Gravity Factor F _g		Flowing Temperature Factor F ₁₁	perature Factor		Metered Flow R (Mcfd)	GOR (Cubic Fo Barrel	eet/ Fluid Gravity
				<u> </u>							
P _c)² =	:	(P _w) ² :	=:	OPEN FLO		VERABILITY .% (F) CALCUI P _e - 14.4) +			-) ² = 0.207) ² =
$(P_c)^2 \cdot (P_a)^2$ or $(P_c)^2 \cdot (P_d)^2$		$ \begin{array}{c} \text{Choose formula 1 or 2:} \\ (P_c)^2 \cdot (P_w)^2 & 1. \ P_c^2 \cdot P_a^2 \\ & 2. \ P_c^2 \cdot P_d^2 \\ & \text{divided by:} \ P_c^2 \cdot P_w^2 \end{array} $		LOG of formula 1. or 2. and divide by:		Backpressure Curv Slope = "n" or Assigned Standard Slope		n x LOG		Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
Open Flow	4		Mcfd @ 14.6	5 neia		Deliverab	nility			Acfd @ 14.65 ps	- Sia
		ed authority o	on behalf of the (states that		•	to make t			•
	_	-	said report is true			•			December		, 20 <u>13</u> .
						_				K	CC WICHI
		Witness	(if any)						For Co	_	
		For Com	mission			-			Chec	ked by	DEC 3 1 201 3
										,	RECEIVED

	der penalty of perjury under the laws of the state of Kansas that I am authorized to request nder Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Inc
and that the for correct to the be of equipment ins	egoing pressure information and statements contained on this application form are true and st 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 Rueb Farm 12-15 grounds 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 ee to supply to the best of my ability any and all supporting documents deemed by Commissionary to corroborate this claim for exemption from testing.
	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. **KCC WICHITA**