KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Tes	t:					(See Ins	struct	tions on Re	verse Side	e)						
Op	en Flo	w				Test Date	٠.				ΔDI	No. 15					
De	eliveral	bilty				iesi Dale	.					023-20747-	00-00				
Company Noble Energy, Inc.						Lease Rueb Farm						12	Well Number				
County Location Cheyenne SW-NW				Section 15			TWP 3S		RNG (E/W) 42W		Acres Attributed			ttributed			
Field Cherry Creek Niobrara Gas Area						Reservoir Niobrara				Gas Gathering Connection Bittercreek Pipeline							
				Plug Bac 1627'	Plug Back Total Depth				Packer Set at N/A								
Casing Size Weight 7", 4-1/2" 17#,					Internal Diameter 9-7/8", 6-1/4"			Set at 304', 1674'		Perforations 1511'		то 1547'					
Tubing Size Weight N/A					Internal Diamete				Set a			rations	То				
						Type Fluid Production Saltwater				Pump Unit or Traveling Plunger? Yes / Yes				No			
Producing Thru (Annulus / Tubing)					% Carbon Dioxide					% Nitrogen			Gas Gravity - G				
Annulus	S															a	
Vertical D	Depth(I	H)					ı	Press	sure Taps				(Me	eter Ru	un) (Pro	over) Size	
Pressure	Buildu	ıp:	Shut in	19/	2	0 09 at 7	:50		(PM)	Taken		20	at		(/	AM) (PM)	
Well on L	.ine:		Started 2/2	20/	2	0 <u>09</u> at <u>8</u>	:15		(PM)	Taken		20	at		(/	AM) (PM)	
			1				OBSE	RVE	D SURFAC	E DATA			Duration of S	Shut-in	24	Hours	
Static / Dynamic Property	mic Size		Circle one: Meter Prover Press psig (Pm)		ential 1	Flowing Temperature t	Well Head Temperature t		Casing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Duration (Hours)		Liquid Produced (Barrels)		
Shut-In	ut-In		poig (r m)		1120				psig 150	psia	psig	psia					
Flow																	
		-					FLOW	STR	EAM ATTR	IBUTES				•••••••			
Plate Coeffiecient (F _b) (F _p) Mcfd		Circle one: Meter or Prover Pressure psia		Pre Exter ✓ P	sion	Grav Fact F _g	or	T	Flowing emperature Factor F ₁₁	Fa	viation actor F _{pv}	Metered Flow R (Mcfd)	(Cub	GOR nic Feet arrel)	,	Flowing Fluid Gravity G _m	
(P _c)² =		:	(P _w) ² =	· =	:	(OPEN FLO	OW) (DE	ELIVI %	ERABILITY 6 (F) CALCUL ² c - 14.4) +		:		(P _a) ² = (P _d) ² =	= 0.20 =	7	
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		(P _c) ² - (P _w) ²		Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _c ²		LOG of formula 1. or 2.		Backpressure Cui Slope = "n"		ssure Curve be = "n" - or	e n x l OG		Antilog		Open Flow Deliverability Equals R x Antilog		
	d'			divided by: F	²-P _w ²	and divide by:	P _c ² - P _v	,		ard Slope		L J			(1)	/lcfd)	
Open Flo				94-6-1	@ 144	SE ania			Deliment	1914			NA-61 @ 44 0				
						65 psia			Deliverab				Mcfd @ 14.6	-			
			n, and that s								day of A	e above repo ugust	rt and that h	e has		odge of	
			Witness (if any)				_	_		100le	to go	94 7	n(2	NEPE N.	
			vvidiess (,,, carry <i>)</i>					•	4	Man 1	(~ /p.Q	2 V) L			INCUEIN	
			For Comm	nission					-			Chec	cked by			AUG 3 1	

exempt status und and that the foreg correct to the best of equipment insta I hereby requa	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. going 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 12-15
gas well on the gr	ounds 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 eto supply to the best of my ability any and all supporting documents deemed by Commission y to corroborate this claim for exemption from testing.
Date: 8/27/09	
	Signature: And 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.