KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test	:				(See Instruc	tions on Re	verse Side	<u>;)</u>					
☐ Op	en Flov	٧			Test Date									
De	liverabi	lty			rest Date	3 :				No. 15 023-20773-00	-00			
Company Noble Energy Inc				Lease Rueb Farm				Well 42-16			nber			
County Location Cheyenne SENE			Section 16		TWP 3S		RNG (E/W) 42W		A	Acres Attributed				
Field	`sook				Reservoir		•	-		hering Connec	tion			
					Niobrara Plug Back Total Depth				Morgan Set at					
5/17/200				·· · · · · · · · · · · · · · · · · · ·	1657'	K TOTAL DEP	· · · · · · · · · · · · · · · · · · ·		rackers					
Casing Size Weight 7", 4-1/2" 17#, 9.5#			Internat 0 9-1/4",			Set at 301', 1724'		Perforations 1520'		то 1554'				
Tubing Size 2-3/8"			Weight	Internal D			Set at		Perforations					
Type Con Single ((De	escribe)			d Production	n		Pump U	nit or Traveling F	Plunger? Yes	/ No		
Producing		(Ann	iulus / Tubing)		Carbon Dioxi	de		% Nitrog	jen	Gas Gra	vity - G		
Tubing				 						<u> </u>				
Vertical C	epin(H)				Pres	sure Taps				(Meter F	lun) (Pr	over) Size	
Pressure	Buildur	o: \$	Shut in1/19) 2	0 11 at 1	1:54	(AM) (PM)	Taken		20	at		ANA /DAA	
Well on L	•		Started 1/20		11 at 1		_				at			
						OBSERVE	D SURFAC	E DATA		r	Duration of Shut-i	26.	31 Hours	
Static / Orifi Dynamic Siz Property (inch-		e Prover Pressur		Pressure Differential	Flowing Well He		Casing		Tubing					
					Temperature t	Temperature ((P _a) or (P _b) or (P _c)		Wellhead Pressure (P _w) or (P _t) or (P _c)		Duration (Hours)		Liquid Produced (Barrels)	
Shut-In			P -				139	psia	psig	psia	<u></u>			
Flow										1	-,			
			·			FLOW STR	REAM ATTR	IBUTES						
Plate	,		Circle one:	Press	Grav	uitu	Flowing	2-	deste -				Flowing	
Coeffiecient (F _b) (F _p) Mcfd			Meter or ver Pressure	Extension	Fac	tor	Temperature Factor	F	viation actor	Metered Flow R	GOR (Cubic Fe	et/	Fluid	
		psia		√ P _m xh	F,	•	F _{it}		F _{pv}	(Mcfd)	Barrei)		Gravity G _m	
					(OPEN FL	OW) (DELIV	/ERABILITY) CALCUI	LATIONS	<u>!</u>			[
(P _c) ² =		_:	(P_)² =	:	P _a =			P _e - 14.4) -		:	(P _a) (P _a)	² = 0.2	07	
				Choose formula 1 or 2		Г٦		ssure Curv		[7]	(a)		on Flow	
(P ₄) ² - (P ₃) ² or		(P _e)²- (P _w)²		1, P _e ² -P _e ²	formula			Slope = "n"		roc	Antilog	Open Flow Deliverability		
$(P_q)^2 \cdot (P_q)^2$				2. P _a ² - P _a ² divided by: P _a ² - P _a	and dividu	P. 7 . P. 2	2 Assigned Standard Slope					Equals R x Antilog (Mcfd)		
_														
														
Open Flow Mcfd @ 14.65 ps				65 psia	psia Deliverability			Mcfd ② 14.65 psia						
		oner	t authority or			etatoe that I	777	· · · · ·	to make t		t and that he ha			
				id report is true			_		г	ne above repor December	t and that he ha			
IDVIS 3	11	,U 61	, and that se	as report is tru	o and conec	_	_		day of _	11/1	11		20	
			Witness (i	any)	······································	KE	CEIVE) C	rey	ForCa	Kuson	<u> </u>		
			······································		· · · · · · · · · · · · · · · · · · ·	MAL	17 20	12	U	<i>V</i>				
			For Comm	15-5100				-	_	Chec	ked by			

KCC WICHITA

	er penalty of perjury under the laws of the state of Kansas that I am authorized to request der Rule K.A.R. 82-3-304 on behalf of the operator_Noble Energy Inc
and that the forest correct to the best of equipment install hereby requirements.	going pressure information and statements contained on this application form are true and t 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 42-16 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 e to 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: 12/27/201	Signature: <u>Regulatory Analyst II</u>

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 dented.

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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