RECEIVED

Kansas Corporation Commission One Point Stabilized Open Flow or Deliverability Test

Type Test	;						(See Ins	tructi	ons on Re	verse Side	e)							
Open Flow Deliverabilty				Test Date	Test Date:					API No. 15								
									•		15	-023	-21023-0	0-00	1	A # - 11 B 1-		
Company Noble Energy Inc					Lease Keller				arms				Well Number 13-7					
County Location Cheyenne NW-SE-NW-SW				Section 7			TWP 2S		RNG (E/W) 38W				,	Acres	Attributed			
Field Cherry Creek				Reservoi Niobrar						as Gathering Connection Southern Star								
Completion Date 11/20/2008				Plug Bad 1383'	k Total I	Depti	h	Packer Set			at							
Casing Size Weight 17#, 10.5#				Internal Diameter 9-7/8", 6-1/4"			Set a 210	Perforations 1222'				то 1262'						
Tubing Si 2-3/8"	bling Size Weight .3/8" 4.7#				Internal Diameter 1.995				Set at 1281'			Perforations			То			
Type Completion (Describe) Single (gas)				Type Flu	Type Fluid Production Saltwater						Pump Unit or Traveling Plunger? yes				Yes / No			
Producing Thru (Annulus / Tubing)					Carbon D	Dioxic	de		% Nitrogen			Gas Gravity - G						
Tubing													•					
/ertical D	epth(H)			•		F	Press	sure Taps						(Meter F	Run) (F	Prover) Size	
Pressure Buildup: Shut in 6/10 20_1				13 at 8	:00		(PM)	AM)(PM) Taken			20				(AM) (PM)			
Well on Line: Started 6/11 20				13 at 8	3:00		(PM)	(PM) Taken 20			20	at	at (AM) (PM)					
						*****	OBSE	RVE	D SURFAC	E DATA			* '	Duratio	n of Shut-	_{in_} 24	Hours	
Static / Dynamic Property	Orific Size (inche	Size Prover Pri		ure	Pressure Differential in Inches H ₂ 0	Flowing Temperature t	Well Head Temperature t		Casing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Tubing Wellhead Pressur (P _w) or (P ₁) or (P _c		ressure	Duration (Hours)		Liquid Produced (Barrels)		
Shut-In	•••		Poig (i iii)	\dashv	1101100 1120				psig 88	psia	psig		psia			<u> </u>		
Flow																		
							FLOW	STR	EAM ATTR	IBUTES								
Plate Coeffiec (F _b) (F Mcfd	ient _p)	Circle one: Meter or Prover Pressure psia			Press Extension ✓ P _m x h	Gravity Factor F _g		Т	Flowing Temperature Factor F _{tt}		viation actor F _{pv}	Metered Flow R (Mcfd)			GOR (Cubic Feet Barrel)		Flowing Fluid Gravity G _m	
								<u> </u>				<u></u>						
⊃)2 =			(P _w)² =	=	:	•	.OW) (DI		ERABILITY % (') CALCUI P _c - 14.4) -			:		_	2 = 0.1 2 =	207	
$(P_c)^2 = \underline{\qquad \qquad }$ $(P_c)^2 \cdot (P_s)^2$ or $(P_c)^2 \cdot (P_d)^2$		(P _c) ² · (P _w) ²		Choose tormula 1 or 2: 1. P _c ² - P _s ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²		LOG of formula 1. or 2. and divide P 2. P		Backpressure Cur Slope = "n"		essure Curv pe = "n" - or ssigned	e n x I O		ГЛ		Antilog		Open Flow Deliverability Equals R x Antilog (Mcfd)	
							,											
					M-61 6 1:	05 = 13:			D = 0;	_ 1674. ·				Mat 4 6	1405 - 1	<u></u>		
Open Flo					Mcfd @ 14.				Deliveral						14.65 psi		·····	
		_	•		ehalf of the report is true				•				=	rt and t	that he ha		wledge of 20 <u>13</u> .	
iu iauto 5	iaiou II	101 0 1	n, and stat s	-wIU	open is nut	, and come	J. LAGU				, 01 _						C WICHI	
			Witness	(if any	γ)				•				ForC	Company				
			For Com	nissio	on				-				Chec	ked by		UŁ	C 3 1 2013	

exempt status und and that the foreg correct to the best of equipment insta	er penalty of perjury under the laws of the state of Kansas that I am authorized to request er Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Incoming 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 lation 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 Keller Farms 13-7
_	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 to supply to the best of my ability any and all supporting documents deemed by Commission to corroborate this claim for exemption from testing.
Date: 12/27/13	
	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

DEC 3 1 2013