KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:					(-	See ins	tructio	ons on Re	verse Side	9)					
	en Flow				Test Date	:					No. 15				
	iverabilty	<i>'</i>								15-	181-20444-0				
Company Noble Er	ergy In	С						Lease Bratche	r			12-19	Well Nu	umber	
County Location Sherman SW-NE-SW-NW				Section 19			TWP 6S		RNG (E/W) 39w		Acres Attributed				
Field Syv-NE-Syv-INVV					Reservoir					Gas Gathering Conne		ection		RECEIVE	
Goodland Niobrara Gas Area					Niobrara				···	Prairie Star					
Completion Date 8/24/2006					Plug Back Total Depth 1486'			l		Packer Set at				DEC 05 2	
Casing Size Weight 7", 4 1/2" 17#, 10.5#				Internal Diameter 9 1/2", 6 1/8"					Perfo 134	rations 4'	то 1364'	KC	C WICH		
Fubing Size Weight 2 3/8" 4.7#				Internal Diameter 1.995			Set at		Perforations		То				
Z 3/8" 4.7# Type Completion (Describe)					Type Flui	Type Fluid Production				Pump Unit or Traveling Plunger? Yes / No					
Single (gas)						Saltwater % Carbon Dioxide				yes % Nitrogen Gas 0			Gravity - G		
Producing Thru (Annulus / Tubing) Tubing					<i>7</i> 6 €	% Carbon Dioxide				% Nillogen Gas Gravity - G					
ertical D				Pressure Taps					***************************************	(Meter F	Run) (P	rover) Size			
ressure	Buildup:	Shut	9/17	, 2	0 12 at 9	:15		(PM)	Taken		20	at		(AM) (PM)	
Vell on Li	ne:	Started 9/18 20		10 10:15		`	_				at (Al				
						OPSE	מאמי	SURFAC	E DATA	<u></u>		Duration of Chut	_{in} 27	Hours	
Static /	Orifice	Meter Prover Pressi		Pressure	Flowing	Well H		Casing		Tubing		Duration of Shut-			
ynamic	Size			Differential in	Temperature	1		Wellhead (P _w) or (F			ead Pressure or (P ₁) or (P ₂)	Duration (Hours)		Liquid Produced (Barrels)	
roperty	(inches			Inches H ₂ 0	t		psig		psia	psig	psia				
Shut-In								56							
Flow					·										
					r	FLOW	STRE	EAM ATTR	IBUTES					T	
Plate Coeffiecient		Circle one: Meter or		Press Extension	Gravity		Flowing Temperature			riation Metered Flow			.,	Flowing Fluid	
(F _b) (F	,) /	Prover Pressure		✓ P _m xh	Factor F _g		Factor		- 1	actor F _{pv}	R (Mcfd)	(Cubic Fe Barrel)		Gravity	
Mcfd		psia			,		F _{ft}						G _m	G _m	
			<u></u>		(OPEN FL	OW) (D	ELIVE	RABILITY) CALCUI	LATIONS	<u> </u>	(D)	° 0.		
) ² =		:	(P _w) ² =_	:	•				•	+ 14.4 =	<u> </u>		2 = 0.2 2 =		
				2 1. P _c ² - P _a ²			٦		ssure Curv	е	Γ٦		1	pen Flow	
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		(P _c) ² - (P _w) ²		2. P _c ² -P _d ²	formula 1. or 2.				pe = "n" - or	n x	LOG	Antilog		Deliverability Equals R x Antilog	
(P _c)2- (I	3,32			divided by: $P_c^2 - P_w^1$	and divide by:	P _c ² - P	2 W		ssigned lard Slope		LJ			(Mcfd)	
pen Flo	W			Mcfd @ 14.	65 psia			Deliverat	oility			Mcfd @ 14.65 ps	ia		
The	ındersigi	ned au	thority, or	behalf of the	Сотрапу,	states ti	hat he	e is duly a	uthorized	to make t	he above repo	ort and that he ha	as knov	wledge of	
e facts s	tated the	erein, a	nd that sa	id report is true	e and correc	t. Exec	cuted t	this the 3	0	day of _	November		,	20 12 .	
			Witness (if	апу)			_	-	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		For	Company			
			For Commi	iceion				-			Che	cked by			

Laladana wadan sasabi	
	y of perjury under the laws of the state of Kansas that I am authorized to requestA.R. 82-3-304 on behalf of the operator Noble Energy Inc
	ssure information and statements contained on this application form are true and
correct to the best of my kn	owledge and belief based upon available production summaries and lease records
	d/or upon type of completion or upon use being made of the gas well herein named. year exemption from open flow testing for the Bratcher 12-19
gas well on the grounds tha	
is cycled is a soul is on vac is not ca	bed methane producer d on plunger lift due to water rce of natural gas for injection into an oil reservoir undergoing ER cuum at the present time; KCC approval Docket No upable of producing at a daily rate in excess of 250 mcf/D y to the best of my ability any and all supporting documents deemed by Commission borate this claim for exemption from testing.
Date: 11/30/2012	·
	Signature: Title: Regulatory Analyst

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.