KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test	Test: (See Instructions on Reverse Side) Open Flow											
Deliverabilty			Test Date:				API No. 15 15-023-20781-00-00					
Company Noble Energy, Inc.					Lease Zweygardt			23-			Well Number	
County	ne		Locat SW-SE		Section 32		TWP 3S		RNG (E/W) 41W		` <u>-</u>	Acres Attributed
Field Cherry C	reek			Reservoir Niobrara			Gas Gathering Conn Southern Star/Kind					
Completion Date 9/21/2007					Plug Bac 1508'	k Total Dept	th		Packer S	Set at		
Casing Size 7", 4-1/2"			Weigl 17#,		Internal Diameter 9-7/8", 6-1/4"		Set at 295', 1552'		Perforations 1392'		то 1462'	
Tubing Size 2-3/8"			Weight 4.7#		Internal Diameter 1.995		Set at		Perforations		То	
Type Con Single (n (De		<u> </u>			n			nit or Traveling	Plunger? Yes) No
		(Anr	nulus / Tubin	g)		% Carbon Dioxide			Yes Rod Pump Sas Gravity - G. Gas Gravity - G.			
tubing											·	
Vertical D	epth(F	1)		•		Pres	sure Taps				(Meter	Run) (Prover) Size
Pressure	Buildu		Shut in2/5		0 13 at 3		(AM) (PM))Taken		20	at	(AM) (PM)
Well on L	ine:		Started 2/6	2	0 <u>13</u> at <u>4</u>	:00	(AM) (PM)	Taken		20	at	(AM) (PM)
						OBSERVE	D SURFAC	E DATA			Duration of Shut-	in 25 Hours
Static / Dynamic Property	Dynamic Size		Circle one: Meter Prover Press psig (Pm)		Flowing Well Head Temperature t t		Casing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _t) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
Shut-In			paig (i iii)	mones 11 ₂ 0		-	psig 68	psia	psig	psia		
Flow												
,						FLOW STE	REAM ATTR	IBUTES				
Plate Coeffiecient (F _b) (F _p) Mcfd		Circle one: Meter or Prover Pressure psia		Press Extension P _m xh	Gravity Factor F _e		Flowing Temperature Factor F ₁₁	Fa	riation actor F _{pv}	Metered Flow R (Mcfd)	v GOR (Cubic Fe Barrel)	Gravitu
(P _e) ² ==		_:	(P _w)² :	=:	(OPEN FL	OW) (DELIV		') CALCUL P _s - 14.4) +		<u>-</u> :	(P _a) (P _d)	² = 0.207 ² =
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		(P _c) ² - (P _w) ²		Choose formula 1 or 2 1. P _c ² · P _s ² 2. P _c ² · P _s ² divided by: P _c ² · P _s	t or 2: LOG of tormuta 2 1. or 2. and divide p 2 p 2		Backpressure Curve Slope = "n" Assigned Standard Slope		· · · · · · · · · · · · · · · · · · ·	roe	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
Open Flow Mcfd @ 14.65 psia						Deliverat	Deliverability Mcfd @ 14.65 psia			ia		
		•	•	on behalf of the aid report is tru			-			ne above repo December	ort and that he ha	as knowledge of, 20 <u>13</u> .
			Witness	(if any)		 				For C	Company	KCC WICH
	·		For Com	mission			-			Chec	cked by	TOO WICE

I declare under penalty	v of perjury under the laws of the state of	Kansas that I am authorized to request
	.A.R. 82-3-304 on behalf of the operator N	
	ssure information and statements contain	
correct to the best of my kne	owledge and belief based upon available p	production summaries and lease records
• •	d/or upon type of completion or upon use b	
	year exemption from open flow testing for	the
gas well on the grounds tha	ıt said well:	
(Check one)		
	bed methane producer	
	d on plunger lift due to water	•
	rce of natural gas for injection into an oil re	eservoir undergoing ER
<u></u>	cuum at the present time; KCC approval De	· -
믔	pable of producing at a daily rate in exce	
<u>ن</u>	, , ,	•
I further agree to suppl	y to the best of my ability any and all supp	porting documents deemed by Commission
staff as necessary to corro	borate this claim for exemption from testir	ng.
Date: _12/26/13		
Date. 12/20/10		
	Signature:	R
	, ,	notivet
	Title: Regulatory Ar	laiysi

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.

DEC 3 1 2013