KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test	:					('See Instruc	tions on Rev	verse Side	?)				
Open Flow					9:			ДРІ	No. 15					
Del	liverab	ilty				Test Date					023-20844-0	00-00		
Company Noble Energy Inc.						Lease Zweygar				·	24-31	Well Number 24-31		
County Location				Section		TWP			RNG (E/W)		Acres Attributed			
Cheyenne SE-SW				31	· · · · · · · · · · · · · · · · · · ·	38	3S		41W Gas Gathering Connection		REC			
Field Cherry Creek					Reservoir Niobrara			Southern Star/Kir			der Morgan		- ULIV	
Completion Date 6/17/2008					Plug Bac 1646'	Plug Back Total Depth 1646'			Packer Set at			RECEIVA DEC 2 6 2 KCC WICH		
Casing Size Weight 7", 4-1/2" 17#, 11.6#				.6#	Internal 0 9-7/8",			Set at 318', 1681'		Perforations 1466'		то КСС 1504'		
Tubing Size Weight 2-3/8" 4.7#					Internal D 1.995	Diameter	Set at 1524'		Perforations		То	,		
Type Completion (Describe) Single (gas)				Type Fluid Production saltwater				Pump Unit or Traveling Plunger? Yes / No yes						
Producing Thru (Annulus / Tubing) tubing					% Carbon Dioxide				% Nitrogen Gas Gravity - G _g					
Vertical D	epth(F	1)					Pres	sure Taps				(Meter I	Run) (Prove	er) Size
Pressure	Buildu	•	Snut in	2/6	2	0_12_at_1	2:30	(AM) (PM)	Taken		20	at	(AM)) (PM)
Well on Li	ine:	;	Started 12	2/7	2	0 12 at 4	:00	(AM) (PM)	Taken		20	at	(AM)) (PM)
					γ		OBSERVE	D SURFACE	E DATA			Duration of Shut-	_{-in_} 27.5	Hours
Static / Dynamic Property	nic Size		Circle one: Meter Prover Pressure psig (Pm)		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) psig psia		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _c) psig psia		Duration Liquid Pro (Hours) (Barre		
Shut-In				_	2			99	psia	psig	psia			
Flow														
-							FLOW STI	REAM ATTR	IBUTES				•	
Plate Coeffiecient (F _b) (F _p) Mcfd		Circle one: Meter or Prover Pressure psia		Press Extension ✓ P _m xh	Grav Fact F _s	tor	Flowing Temperature Factor F _{ft}		riation actor = pv	Metered Flow R (Mcfd)	GOR (Cubic Fe Barrel)	et/	llowing Fluid Gravity G _m	
(P _c) ² =		:	(P _w)²	=	:	•	, ,	/ERABILITY) % (P) CALCUL 'a - 14.4) +		:	_	² = 0.207 ² =	_
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		(P _c) ² - (P _w) ²		pose formula 1 or 2: 1. $P_c^2 - P_a^2$ LOG of formula 2. $P_c^2 - P_d^2$ 1. or 2. and divide by: $P_c^2 - P_v^2$		Backpress Stope P2-P2 Assi		ssure Curve be = "n" orsigned ard Slope	l n x	roe	Antilog	Delivera Equals R >	Open Flow Deliverability quals R x Antilog (Mcfd)	
Open Flo	l			Mcfd @ 14.65 psia					ility		Mcfd @ 14.65 psia			
,			ح مطاورها	or '		 		Deliverab		· · ·				
		-	•					ie is duly au I this the _20			•	rt and that he ha	as knowledg , 20 _	
			Witness	i (if an	у)			_			For C	ompany		
			En Co-	arnie o i	nh.			_	·		Ch	sked by		·
			For Con	iriiiSSK	UTI						Chec	ked by		

	er penalty of perjury under the laws of the state of Kansas that I am authorized to request
and that the foregone correct to the best of equipment insta	der 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. The est a one-year exemption from open flow testing for the Zweygardt 24-31 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 to supply to the best of my ability any and all supporting documents deemed by Commission by to corroborate this claim for exemption from testing.
Date: 12/20/2012	Signature: 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.