KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Tes	t:				(See Instruct	tions on Rev	erse Side)					
Op	en Fid	w			T 0	_			4.00	. N. 45				
De	liveral	bilty			Test Date	3 :				No. 15 023-20843- (00-00			
Company Noble E		· Inc					Lease Zweygar	dt			23-3	Well Nu	ımber	
County			Locati	on	Section		TWP		RNG (E	/W)		Acres /	Attributed	
Cheyenne		NE-SW	·	31			3S		41W					
Field Cherry Creek					Niobrara	Reservoir Niobrara			Gas Gathering C Southern Star/h					
7/10/200		te			Plug Bac 1634'	k Total Dept	ih		Packer \$	Set at				
Casing Size 7", 4-1/2"			Weigh 17#,			Internal Diameter 9-7/8", 6-1/4"		Set at 317', 1678'		Perforations 1472'		то 1510'		
Tubing S 2-3/8"	ize		Weigh 4.7#	Weight Internal Diameter Set at Perforations To 4.7# 1.995 1530'			,							
Type Cor Single (escribe)		Type Flui Saltwa	d Production	ח		Pump U	nit or Traveling	Plunger? Ye	s / No		
		<u> </u>	nulus / Tubing	1)		arbon Dioxi	de		% Nitrog	jen	Gas	Gravity - (G ₄	
Tubing												•	•	
Vertical E	epth(l	H)				Pres	sure Taps				(Mete	r Run) (P	rover) Size	
Pressure	Builde		Shut in _3/1:	5 z	0 11 at 1	0:40	(PM)	Taken		20	at		(AM) (PM)	
Well on L	.ine:		Started 3/10	32	o <u>11</u> at <u>1</u>	2:20	(AM) PM	Taken		20	at		(AM) (PM)	
			· · · · · · · · · · · · · · · · · · ·		r	OBSERVE	D SURFACE	DATA			Duration of Shi	ut-in_25.	.5 Hours	
Static /	Orif		Circle one: Meter	Pressure Differential	Flowing	Well Head	Casir Wellhead F			Tubing ad Pressure	Ouration		d Produced	
Dynamic Property	Si: (inct		Prover Pressu	<i>re</i> in	Temperature t	Temperature t	(P _w) or (P _t		(P _w) o	r (P,) or (P _c)	(Hours)		Barrels)	
Shut-In			psig (Pm)	Inches H₂0			174	psia	psig	psia	<u> </u>		·	
Flow														
						FLOW STR	EAM ATTRI	BUTES						
Plate			Circle one: Meter or	Press	Grav	rity	Flowing	Dev	iation	Metered Flov	v GO	R	Flowing	
Coeffied (F _b) (F	1	Pro	weter of ver Pressure	Extension ✓ P _m xh	Fac F	Of	emperature Factor		ctor	R (Mcfd)	(Cubic Barr		Fluid Gravity	
Mcfd			psia	✓ F _m xB		•	F _{It}	,	ρv	(MCIO)	Dair	ei) 	G _m	
					(OPEN FL	OW) (DELIV	ERABILITY)	CALCUL	ATIONS			$(2)^2 = 0.2$	107	
(P _c)² =		_:	(P _w) ² =	<u></u> :	P _d =		% (P _a	- 14.4) +	14.4 =	:		(a) = 0.2		
(8.)2 (1	D)2			Choose formula 1 or 2		$\overline{\Gamma}$		sure Curve		ГЪ		Oı	oen Flow	
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		(P _c) ² - (P _w) ²		1. P _e ² · P _e ²	formula 1. or 2.	formula		Slope = "n"		LOG	Antilog	Dei	iverability	
(P _c)²-(I	P _a)²			2. P _c ² - P _d ² sMored by: P _c ² - P _d ²	and divide	P.2- P.2		gned rd Slope					R x Antilog (Mdfd)	
									1				÷	
												-		
L						 								
Open Flor	w			Mcfd @ 14.	65 psia		Deliverabil	ity			Mcfd @ 14.65 p	osia	· · · · · · · · · · · · · · · · · · ·	
The	unders	igne	d authority, or	behalf of the	Company, s	tates that h	e is duly aut			•	rt and that he	has know	ledge of	
the facts s	tated (herei	n, and that sa	id report is true	and correc	t. Executed	this the 8		play of	ecember	- / -	 .	20 11 .	
								C.K	י מגע	//k	1/10	17.		
			Witness (i	any)					<u> </u>	For C	company	REC	EIVED	
			For Comm	ssion			_		V	Chec	ked by	DEC 1	2 8 2011	

KCC WICHITA

I declare	under penalty of perjury under the laws of the state of Kansas that I am authorized to request
	under Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Inc
	oregoing pressure information and statements contained on this application form are true and
	best of my knowledge and belief based upon available production summaries and lease records
of equipment	nstallation and/or upon type of completion or upon use being made of the gas well herein named.
I hereby r	equest a one-year exemption from open flow testing for the Zweygardt 23-31
	e grounds that said well:
(Ci	neck one)
	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
I further a	gree to supply to the best of my ability any and all supporting documents deemed by Commission
staff as neces	sary to corroborate this claim for exemption from testing.
Date: 12/8/20	<u>11 </u>
	Signature: Cleuf Johnson
	7.50-00.

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 2 8 2011