KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Tes	t:				(See Instruct	ions on Rev	erse Side))			
□ Op	en Flo	w										
De	eliveral	oilty			Test Date) :				No. 15 023-21061-0	00-00	
Company	· · · · · · · · · · · · · · · · · · ·		<u> </u>				Lease			020 21001 0		Well Number
Nobie E		Inc					Keller Fa	arms			33-18	redii i tanibar
County Location			on	Section TWP				RNG (E	/W)		Acres Attributed	
Cheyenne SE-NE-NW-SE			NW-SE	18 29				38W				
Field	l				Reservoir					thering Conne	ection	
Cherry Creek Completion Date					Niobrara Plug Back Total Depth				rn Star			
11/21/20		t e			1351'	к тогаг Берг	iri		Packer :	set at		
Casing S			Weigh	 [Internal D	Diameter	Set a	t	Perfo	rations	То	
7", 4-1/2"			17#, 9).5#	9-7/8", 6-1/4"		153',1396'		1200'		1238'	
Tubing Size			Weight		Internal Diameter		Set at		Perforations		То	
2-3/8"			4.7#		1.995		1260) [,]			· · · · · · · · · · · · · · · · · · ·	
Type Cor Single (•	•	escribe)		Type Flui Saltwa	d Production	1		Yes	nit or Traveling	Plunger? Yes	/ No
			nulus / Tubing	١		arbon Dioxid	de	 	% Nitro	ien	Gas Gr	avity - G
Tubing	9 11111	, (rai)	ridios r tobing	,	70 0	ALDON DIOXI			70 14711-00	jei i	Gas Gi	avity - U _g
Vertical C	Depth(i					Press	sure Taps				(Meter I	Run) (Prover) Size
												, ,
Pressure	راد الد		Shut in 6/30) ,	0 11 at 1	0:00	(T) (T) (T)	Talea			at	(414) (514)
riessure	Bullac						\smile					
Well on L	.ine:		Started 7/5	2	0 11 at 1	2.00	(AM) (PM)	Taken		20	at	(AM) (PM)
												. 122
			Circle one:	Pressure		OBSERVE	D SURFACE		1	- m.	Duration of Shut-	in Hours
Static / Orifi Dynamic Siz Property (inch		Ce Mater		Differential	Flowing Temperature	Well Head Temperature	Casing Wellhead Pressure		Tubing Wellhead Pressure		Duration	Liquid Produced
			Prover Pressu psig (Pm)	re in Inches H ₂ 0	t	t	(P _*) or (P ₁) or (P _c)		(P_w) or (P_t) or (P_c)		(Hours)	(Barrels)
-			psig (Fili)	inches H ₂ U			psig	psia	psig	psia		
Shut-In							100		<u> </u>			
Flow									1			
\			1			FLOW STR	EAM ATTRI	BUTES				<u></u>
Plate			Circle one:				Flowing	1				Flowing
Coeffied			Meter or	Press Extension	Grav Fact	· 1 7	emperature		iation ictor	Metered Flow	GOR (Cubic Fe	shirt
(F _b) (F		Pro	over Pressure psia	√ P _m xh	F	.	Factor F _{II}		pv	(Mcfd)	Barrel)	Gravity G_
141010	<u>'</u>				+	-	* ()	 				<u> </u>
											<u> </u>	
					(OPEN FL	OW) (DELIV	ERABILITY)	CALCUL	ATIONS		(P)	² = 0.207
(P _c) ² =		_:	(P _w) ² =	<u> </u>	P _d =		% (P,	14.4) +	14.4 =	:	(P _a)	
				Choose formula 1 or 2	:	$\overline{\Gamma}$	Backpres	sure Curve		Γ٦Ϊ	·	Open Flow
(P _e) ² - (1	P_)*	(1	P _c) ² - (P _m) ²	1. P _c ² · P _s ²	LOG of formula			e = "n"	n x	LOG	Antilog	Deliverability
(P _c) ² - (I	P ₄)²			2. P ₄ ² P ₄ ²	1. or 2.	P.2. P.2	Ass	igned rd Slope			ŭ	Equals R x Antilog (Mcfd)
			- '	Wided by: Pc2 - Pw	by:	<u> </u>	Starioa	на эюрь				
									_ _			
ŀ	İ											
Open Flo			<u> </u>	Mcfd @ 14.	65 peia		Dalivorabii	li+vz			Mord & 14 SE noi	· · · · · · · · · · · · · · · · · · ·
Oben 1:10	••			WIGIG W 14.	oo pala		Deliverabi	····y			Mcfd @ 14.65 psi	<u>a</u>
The i	unders	igne	d authority, or	behalf of the	Company, s	tates that h	e is duly aut				rt and that he ha	s knowledge of
the facts s	tated t	herei	in, and that sa	id report is true	and correct	t. Executed	this the 18		day of N	ovember		, ₂₀ <u>11</u> .
							,	01	•	01	/	
			Witness (if	anvl				N	<u>u</u>	(/ Q -	ompany	AL MARKINS
			**************************************	wiff						U FOR	VIII-VIII-Y	RECEIVED
			For Commi	ssion						Chec	ked by	PEC 1 3 2011

KCC WICHITA

exempt st	dare under penalty of perjury under the laws of the state of Kansas that I am authorized to request tatus under Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Inc. The foregoing pressure information and statements contained on this application form are true and the best of my knowledge and belief based upon available production summaries and lease records
	nent installation and/or upon type of completion or upon use being made of the gas well herein named.
	by request a one-year exemption from open flow testing for the Keller Farms 33-18 on the grounds 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 her agree to supply to the best of my ability any and all supporting documents deemed by Commissionecessary to corroborate this claim for exemption from testing.
Date: <u>11</u> /	
	Signature: Cley Johnson Title: Regulatory Analyst II

Instructions:

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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 signed and dated on the front side as though it was a verified report of annual test results.

DEC 13 2011