

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test	:					(See Instruct	ions on Re	everse Side	∍)					
	en Flo liverab			4.		Test Date 2/22/20				API 023	No. 15 3-20717 -	ΔQ(50		
Company		eve	lopment C	orp		, .		Lease Gema	ehlich		. 101		43-18	Vell Nur	nber
County Location Cheyenne SWNESE			Section 18		TWP 2S			RNG (E/W) 41W		Acres Attributed					
Field Cherry	Cree	ĸ	•			Reservoir Niobrai					hering Conn ureka Gat			11 11 11	######################################
Completic 12/13/2		е				Plug Bac 1645'	k Total Dept	h .		Packer S n/a	Set at				
Casing S 4.5"	ize		′ Weigh 10.5#			Internal [4"	Diameter	Set 166		Perfo 153	rations 2'		To 1544'		
Tubing Si 2.375"	ize		Weigh 4.75 #			Internal [Diameter	Set 157		Perfo	rations		То		
Type Con N2 Frac		n (De	escribe)			Type Flui Brine \	d Production Vater	٦		Pump Ur Yes, F	nit or Traveling	g Plunger?	Yes /	No No	
Producing	•	(Anı	nulus / Tubing)		% C	Carbon Dioxi	de	•	% Nitrog	en		Gas Gra	vity - G	g
Vertical D		l)					Press	sure Taps		· · · · · · · · · · · · · · · · · · ·			(Meter R	un) (Pr	over) Size
Pressure	Buildu	p:	Shut in 2/2	2	2	0 11 at 1	0:30am	(AM) (PM)	Taken_0	2/23	20	11 at_	10:40ar	<u>m</u> (AM) (PM)
Well on L	ine:		Started		2	0 at		(AM) (PM)	Taken		20	at		(AM) (PM)
							OBSERVE	D SURFAC				Duration	of Shut-ir	24	Hours
Static / Dynamic Property	Orifi Siz (inch	е	Circle one: Meter Prover Pressu psig (Pm)	re Di	ressure fferential in ches H ₂ 0	Flowing Temperature	Well Head Temperature t	Wellhead	sing ' I Pressure P ₁) or (P _c) psia	Wellhe	fubing ad Pressure r (P _t) or (P _c) psia	Durat (Hou			f Produced Barrels)
Shut-In					2		-	50	psia	poly	pola				
Flow								<u> </u>							
						Т.	FLOW STR	REAM ATT	RIBUTES			<u> </u>			
Plate Coeffiec (F _b) (F Mcfd	ient p)	Pro	Circle one: Meter or over Pressure psia	E	Press ktension P _m x h	Grav Fac F	tor	Flowing Temperature Factor F _{ft}	F.	viation actor F _{pv}	Metered Flo R (Mcfd)	E .	GOR (Cubic Fee Barrel)	et/	Flowing Fluid Gravity G _m
						,									
(D.)3			(D.)3			`	OW) (DELIV		•				-	= 0.20)7
(P _c) ² =		<u>- : </u>		Choose	formula 1 or 2	1			P _c - 14.4) - essure Curv		Г 7		(P _d)-	=	en Flow
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		(F			P _c 2 - P _a 2 P _c 2 - P _d 2 _{By:} P _c 2 - P _w	LOG of formula 1. or 2. and divide by: P 2 - P 2 c w		Slope = "n" or Assigned Standard Slope		n x LOG		Antilog		Deliverability Equals R x Antilog (Mcfd)	
				-t! N							·				
Open Flo				M	ofd @ 14.	65 psia		Delivera	bility			Mcfd @ 1	4.65 psia		
· · · · · · · · · · · · · · · · · · ·		iano	d authority, or				etates that h			to make th	ne above ren				edge of
		•	in, and that sa			• •		•		day of		orr aria in	it no nac		2011
110 1000 0	natou t	1010	m, and mat of				Enoughou			DE	m				EIVED
			Witness (i						17			Company ecked by	ż	AUG	0 2 2011
			For Comm	ission			•				Che	scred by			VICHITA

	der penalty of perjury under the laws of the state of Kansas that I am authorized to reques
	der Rule K.A.R. 82-3-304 on behalf of the operator Petroleum Development Corp
and that the fore	going pressure information and statements contained on this application form are true and
correct to the be	st of my knowledge and belief based upon available production summaries and lease records
• •	tallation and/or upon type of completion or upon use being made of the gas well herein named
l hereby requ	uest a one-year exemption from open flow testing for theGemaehlich 43-18
gas well on the g	rounds that said well:
(0)	
(Cnec	k one)
	is a coalbed methane producer
<u> </u>	is cycled on plunger lift due to water is a source of natural gas for injection into an oil reservoir undergoing ER
<u></u>	
	is on vacuum at the present time; KCC approval Docket No
<u> </u>	is not capable of producing at a daily rate in excess of 250 mcf/D
I further agre	ee to supply to the best of my ability any and all supporting documents deemed by Commiss
ŭ	ry to corroborate this claim for exemption from testing.
31411 43 11000334	y to correspond the ciam for exemption from todaing.
0=40400	
Date: 07/13/201	<u>1'</u>
,	
	Circumstance of Man-
	Signature:
	Title: Sr. Engineering Tech

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

AUG 0 2 2011 KCC WICHITA