KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

ype Test:				(See Instru	uctions on Rev	rerse Side))			
Open	Flow			Test Date	. .			ΔΡ	No 15119	-21,125 -()(000
✓ Delive	rabilty			6/22/20				AF	140. 15-77.5	-21,125	
ompany uantum R	Resourc	es				Lease Adams f	Ranch			13-10	Well Number
ounty Location leade 1575' FSL, 1150' FWL			Section 10		TWP 35S			/W)	Acres Attributed		
Field Cimmaron Bend			Reservoir Chester				Gas Gathering Conn DCP		ction RECEIV		
Completion Date		Plug Back Total Depth 6347'		epth		Packer Set at N/A			JUN 282		
asing Size 1/2"			Internal Diameter			Set at 6388'		orations 18' -	то 6279'	KCC WICH	
ubing Size 7/8"			Internal Diameter		6142	6142'		orations	То		
ype Completion (Describe) mmingled (Gas+Oil)			Type Fluid Production ,oil, water				Pump Unit or Traveling Plunger? Yes / No Yes Pumping unit				
oducing Ti oth	hru (An	nulus / Tubing)		% C	arbon Dio	oxide		% Nitrog	gen	Gas Gr	avity - G _g
ertical Dept	th(H)				Pre	essure Taps				(Meter I	Run) (Prover) Size
essure Bu	ildup:	Shut in 6	121 20	LL at_	7:15	(PM)	Taken	6/2	20	11 at 9: 15	(4) (PM)
'ell on Line	:	Started 6/	2 2 20	at	9:15	_ (M) (PM)	Taken	6/2	2 20	11 at 9:15	AM) (PM)
					OBSER\	/ED SURFACE	DATA		*	Duration of Shut-	in 24 Hours
namic Size		Circle one: Meter Prover Pressure	leter Differential Pressure in		Well Head Temperatu t	ature (P_w) or (P_1) or (P_2)		Tubing Wellhead Pressure (P _w) or (P _t) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
Shut-In		psig (Pm)	Inches H ₂ 0			280	psia	psig 220	psia O		
Flow						220		100			
					FLOW S	TREAM ATTRI	BUTES				
Plate Coeffiecient (F _b) (F _p) Mcfd		Circle one: Meter or over Pressure psia	Press Extension P _m xh	Grav Fac F _s	tor	Flowing Temperature Factor F ₁₁	Fa	riation actor = pv	Metered Flor R (Mcfd)	W GOR (Cubic Fe Barrel)	Gravity
				(OPEN FL	OW) (DEL	.IVERABILITY)	CALCUL	ATIONS	<u> </u>		² = 0.207
_c) ² =	:	(P _w) ² =	:	P _d =		_% (P	c - 14.4) +	14.4 = _	:	(P _a)	
$(P_c)^2 - (P_s)^2$ or $(P_c)^2 - (P_d)^2$	(1	(P _c) ² - (P _w) ² Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²		LOG of formula 1. or 2. and divide by:		Slop	Backpressure Curve Slope = "n" or Assigned Standard Slope		rog	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
4											
pen Flow			Mcfd @ 14.6	85 neia		Deliverab	ility			Mcfd @ 14.65 ps	ia
							2~2	day of	June	ort and that he ha	. 20 U
7	N	Witness (if a	iny)				Q	<i>uant</i>	um R	esource.	S
	······································	For Commiss	sion						Che	cked by	

xempt status und	ler Rule K.A.R. 82-3-304 on behalf of the operator Quantum Resources Manage	ment
	poing pressure information and statements contained on this application form a t of my knowledge and belief based upon available production summaries and le	
f equipment insta	allation and/or upon type of completion or upon use being made of the gas well he est a one-year exemption from open flow testing for the Adams Ranch 13-10	
	ounds that said well:	
(Check	onel	RECEIN
	is a coalbed methane producer	JUN 2 8
	is cycled on plunger lift due to water	
	is a source of natural gas for injection into an oil reservoir undergoing ER	KCC WIC
	is on vacuum at the present time; KCC approval Docket No.	
\checkmark	is not capable of producing at a daily rate in excess of 250 mcf/D	
•	. e to supply to the best of my ability any and all supporting documents deemed by y to corroborate this claim for exemption from testing.	y Commission
ate: <u>6/22/2011</u>	·	
	Signature: The Foreman	

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 **QBSERVED 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.