KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:		• • • • • • • • • • • • • • • • • • • •		(See Instruc	tions on Rev	verse Side,)					
Open Flow Deliverability					Test Date:				API No. 15 15-007-19006-00-00				
Company			<u> </u>	9/30/14		Lease		15-			Well Numb	er	
WOOLSEY OPERATING COMPANY, LLC					HOPKINS, MAMMIE					1	<u> </u>		
County Location BARBER C SE NW			Section 30		TWP 32S			RNG (E/W) 13W		Acres Attri	ibuted		
Field PALMER			Reservoir MISSIS	SIPPIAN		Gas Gathering Conn ONEOK FIELD SE							
Completion Date 12/23/60				Plug Bac 4569	k Total Dep	oth	Packer Set at NONE						
Casing Size Weight 4.500 10.500			Internal E 4.052	Internal Diameter 4.052		Set at 4688		orations 55	то 4561				
Tubing Size 2.375			Internal Diameter 1.995		Set at 4554		Perforations OPEN		То				
Type Completion (Describe) SINGLE			Type Flui OIL, W	d Production	on	Pump Unit or Traveling F PUMPING			Plunger? Yes / No				
Producing Thru (Annulus / Tubing)					% Carbon Dioxide			% Nitrog		Gas Gravity - G _g			
ANNULUS Vertical Depti			<u>.</u>		Pres	ssure Taps				(Meter	Run) (Prov	er) Size	
4558													
Pressure Buil	ldup:	Shut in _9/2	9/14 2	0 at		(AM) (PM)	Taken_09	9/30/14	20	at	/A)	/I) (PM)	
Well on Line:				0 at		. (AM) (PM)	Taken		20	at	(AN	f) (PM)	
		Circle one:			OBSERVI	ED SURFACI			_	Duration of Shut	-in	Hours	
Dynamic	namic Size P		Pressure Differential ure in Inches H ₂ 0	Flowing Temperature t	Weil Head Temperature t	Casing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)		
Shut-In		psig (Pm)	mones H ₂ O			psig 120	psia	psig 80	psia	24			
Flow													
•					FLOW ST	REAM ATTR	IBUTES						
Plate Coefficcient (F _b) (F _p) Mcfd		Circle one: Meter or Prover Pressure psia Prover Pressure psia Prover Pressure		Gravity Factor F _g		Temperature Fac		iation Metered Flow ctor R F _{pv} (Mcfd)		w GOR (Cubic Feet/ Barrel)		Flowing Fluid Gravity G _m	
									<u></u>				
(D)2 —		/D \2	_	,	• •	VERABILITY % (F	-) ² = 0.207		
(P _c) ² =:		(P _w) ² =	Choose formula 1 or 2	2:			% (P _c - 14.4) + Backpressure Curve			ر۳ م)2 =	Open Flow	
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	(F	(P _c) ² - (P _w) ² 1. P _o ² - P _e ² 2. P _o ² - P _d ² divided by: P _o ² - P _w ²		LOG of formula 1. or 2. and divide by:		Slope = "n" or Assigned Standard Slope		n x LOG		Antilog	Deliverability Equals R x Antilog (Mcfd)		
							_		_				
				<u></u>									
Open Flow Mcfd @ 14.65 psia						Deliverab	Deliverability Mcfd @ 14.65 psia						
	=							,	the above repo	ort and that he h			
the facts state	d therei	in, and that s	aid report is tru	e and correc	t. Execute	d this the	<u>-</u>	day of	· P ~	400.	77	<u>14</u> .	
		Witness ((if any)			-		w	For	Company Company		Received PORATION	
		For Comm	nission			-			Che	cked by	- 0 C	7 2 2 3	

exempt status unde	r penalty of perjury under the laws of the state of Kansas that I am authorized to request er Rule K.A.R. 82-3-304 on behalf of the operator WOOLSEY OPERATING CO., LLC being pressure information and statements contained on this application form are true and
correct to the best	of my knowledge and belief based upon available production summaries and lease records lation and/or upon type of completion or upon use being made of the gas well herein named. st a one-year exemption from open flow testing for theMAMIE HOPKINS 1
(Check	unds that said well: 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
_	to supply to the best of my ability any and all supporting documents deemed by Commission to corroborate this claim for exemption from testing.
Date: 10/15/14	
	Signature: Win R Hallay L. Title: FIELD MGR.

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.