## Kansas Corporation Commission One Point Stabilized Open Flow or Deliverability Test

Type Test: (See Instructions on Rev								verse Side	)				
Open Flow								ADI	N= 45				
i Dalina a la lita a					Test Date: Sept 30, 2010			API No. 15 15-025-20200 — OOOO					
Company		orat	tion		Copt Co	Lease Harper			,		Well Number #1-33		
				Section 33				RNG (E/W) 21W		Acres Attributed 160			
Field Harper Ranch				1 10 10 10 10 10 10 10 10 10 10 10 10 10		Reservoir Morrow				hering Conne idstream	ction		
					Plug Bacl 5466'	Plug Back Total Depth 5466'			Packer S	Set at			
Casing Size 4-1/2"			Weight 10.50#		Internat Diameter 3.950"		Set at 5605'		Perforations 5440'		то 5444'		
Tubing Size 2-3/8"			Weigh 4.70#		Internal Diameter 1.995"		Set at 5420'		Perforations		То		
Type Completion (Describe) Single					Type Fluid Oil and	Pump Unit or Travel Pumping Unit				ng Plunger? Yes / No			
Producing Thru (Annulus / Tubing)					% C	% Carbon Dioxide			% Nitrog	en	Gas Gravity - G <sub>g</sub>		
Tubing													
Vertical D		•				Pres	sure Taps				(Meter F	Run) (Prover) Siz	
Pressure	Buildu	o: :	Shut in Ser	ot 292	0_10_at_10	0:00 AM	(AM) (PM)	Taken_Se	ept 30	20	10 at 2:00 P	M (AM) (PM)	
Well on L	ine:	;	Started	2	0 at	A.T	(AM) (PM)	Taken		20	at	(AM) (PM	
						OBSERVE	D SURFAC	E DATA			Duration of Shut-	in 24 Ho	
Static / Dynamic	Į.		Circle one: Meter Prover Pressu		Flowing Well Head Temperature t		Casing Wellhead Pressure $(P_w)$ or $(P_t)$ or $(P_c)$		Tubing Wellhead Pressure $(P_w)$ or $(P_t)$ or $(P_c)$		Duration (Hours)	Liquid Produced (Barrels)	
Shut-In			psig (Pm)	Inches H <sub>2</sub> 0			psig 110	psia 124.4	psig	psia			
Flow													
·						FLOW STR	EAM ATTR	IBUTES					
Plate Coefficcient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd		Pro	Circle one: Meter or over Pressure psia	Press Extension ✓ P <sub>m</sub> x h	Grav Fact	or 1	Flowing Cemperature Factor F <sub>ft</sub>	Fa	iation actor . - pv	Metered Flow R (Mcfd)	GOR (Cubic Fe Barrel)	et/ Flowing Fluid Gravity G <sub>m</sub>	
<u> </u>				:	(OPEN FL	OW) (DELIV	ERABILITY	) CALCUL	ATIONS		(P.)	<sup>2</sup> = 0.207	
(P <sub>c</sub> ) <sup>2</sup> =		_:	(P <sub>w</sub> ) <sup>2</sup> =	:	P <sub>d</sub> =		% (I	P <sub>c</sub> - 14.4) +	14.4 =		u	? =	
$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$		(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>		Choose formula 1 or 2  1. $P_c^2 - P_g^2$ 2. $P_c^2 - P_d^2$ divided by: $P_c^2 - P_w$	LOG of formula 1. or 2. and divide   P 2 P 2		Backpressure Curve Slope = "n" or Assigned Standard Slope		n x LOG		Antilog	Open Flow Deliverability Equals R x Antil (Mcfd)	
				c w									
Open Flo		Mcfd @ 14.65 psia					Deliverability		Mcfd @ 14.65 psia				
The	unders				Company, s			uthorized t	day of C	ne above repor	t and that he ha	s knowledge of	
			Witness (	f any)			R	CEIVE	A	For C	ompany	7)	
			For Comm	nission			NC	V 05	2010	Chec	ked by		

I declare under penalty of perjury under the laws of the state of Kansas that I am authorized to requee exempt status under Rule K.A.R. 82-3-304 on behalf of the operator Hummon Corporation	est —
and that the foregoing pressure information and statements contained on this application form are true a correct to the best of my knowledge and belief based upon available production summaries and lease recor	ds
of equipment installation and/or upon type of completion or upon use being made of the gas well herein name.  I hereby request a one-year exemption from open flow testing for the Harper Ranch #1-33	∌d. —-
gas well on the grounds that said well:	
(Check 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 agree to supply to the best of my ability any and all supporting documents deemed by Commistaff as necessary to corroborate this claim for exemption from testing.	ssion
Date: Och 28, 2010 Signature: Dath Landug Title: Production Administrator	- <b>)</b> [

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

NOV 0 5 2010

KCC WICHITA