## KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:				•	(See Instruc	ctions on Re	verse Sid	15-075-20146-00-00					
☐ Open Flow ☐ Deliverabilty				Test Date:				API No.					
Company				5-22-	12	Lease		<u> </u>			Well N	umber	
		ating, Inc.				Livingst	on			1	Well IV	umber	
County Location Hamilton C SW/4			Section 16		TWP 23S		RNG (E/W) 40W		Acres Attributed		Attributed		
Field Bradshaw				Reservoir Winfield			Gas Gathering Connection DCP Midstream						
Completion Date .				Plug Back Total Depth 2585'				Packer Set at 2528' - 2538'					
Casing Size Weight 10.5			Internal I 4.052	Diameter		Set at 2600'		Perforations					
Tubing Size Weight 2-3/8" 4.7			Internal I	Diameter	Set at <b>2546'</b>		Perforations		То				
Type Completion (Describe) Single - Gas				Type Fluid Production Water			Pump Unit or Traveling Plunger? Yes / No Pump Unit - Rod						
Producing Thru (Annulus / Tubing)					% Carbon Dioxide				en	Gas G	Gas Gravity - G <sub>g</sub>		
Annulus  Vertical Depth(H)				Pressure Taps Flange					(Meter 3.5"	Run) (F	Prover) Size		
Pressure Buildup: Shut		Shut in	5-21 2	0/2at 7:24				5-22 20/		12 at 7,29		(AM) (PM)	
Well on Line:		Started	20	at <u> </u>		(AM) (PM) Taken		20		at		(AM) (PM)	
		1			OBSERVE	D SURFACI	E DATA			Duration of Shut	-in <b>_</b>	24 Hours	
Static / Orifice Dynamic Size Property (inches)		Circle one Meter Prover Press	Differential	Flowing Temperature t		Wellhead	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> ) psig psia		ubing ad Pressure (P,) or (P <sub>c</sub> )	Duration (Hours)	1 .	Liquid Produced (Barrels)	
Property Shut-In	(menes)	psig (Pm	) Inches H <sub>2</sub> 0	t t					psig psia				
Flow							-70			24			
		<u> </u>			FLOW STR	REAM ATTR	BUTES						
Plate Coefficcient (F <sub>b</sub> ) (F <sub>p</sub> )		Circle one: Meter or over Pressure psia	Press Extension ✓ P <sub>m</sub> x h	Grav Fact	or Temperature Factor		Deviation Factor F <sub>pv</sub>		Metered Flow R (Mcfd)	(Cubic Fe	GOR (Cubic Feet/ Barrel)		
Wicia	_	, , , , , , , , , , , , , , , , , , ,	+ -	1 1		F <sub>ft</sub>						G <sub>m</sub>	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·	(OPEN FLO	OW) (DELIV	ERABILITY)	CALCUL	ATIONS		(P.)	) <sup>2</sup> = 0.2	207	
P <sub>c</sub> ) <sup>2</sup> =	<del>:</del>	(P <sub>w</sub> ) <sup>2</sup> :		P <sub>d</sub> =		% (P	<sub>c</sub> - 14.4) +	14.4 =	:	(P <sub>a</sub> )			
(P <sub>c</sub> ) <sup>2</sup> - (P <sub>a</sub> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub>		P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	1. P <sub>c</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> 2. P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup> divided by: P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup>	1. P <sub>c</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> LOG of formula 2. P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup> 1. or 2. and divide		Backpressure Curve Slope = "n" oror Assigned Standard Slope		n x LOG		Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)		
			- c w				•						
								,					
pen Flow	·		Mcfd @ 14.6	5 psia		Deliverabi	lity		<u> </u>	14.65 ps	ia		
			on behalf of the one aid report is true				a -	make the	e above report	t and that he ha		ledge of 20 / 2 .	
							(	Jan	ice K	liply		RECEIVE	
		Witness (						0	For Čo Check	mpany d	ال	UL 13 2	
									Check		KC	UL 132 CWICH	
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exempt s and that correct to of equipr	clare under penalty of perjury under the laws of the state of Kansas that I am authorized to request status under Rule K.A.R. 82-3-304 on behalf of the operator Horseshoe Operating, 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 ment installation and/or upon type of completion or upon use being made of the gas well herein named. The eby request a one-year exemption from open flow testing for the Livingston 1 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  her agree to supply to the best of my ability any and all supporting documents deemed by Commission ecessary to corroborate this claim for exemption from testing.
Date:	7-9-12  Signature: <u>Janice Ripley</u> Title: Production Assistant

## 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.