KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST
(See Instructions on Reverse Side)

Type Test:

☐ Open Flow

☒ Deliverability WHSIP

Test Date: 11/8/11

API No. 15-075-20332 – ○○○○

Company	Lease	Well Number
LINN OPERATING, INC.	HCU	3231-B

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
HAMILTON	C NW	32	23S	41W	

Field	Reservoir	Gas Gathering Connection
BRADSHAW	WINFIELD	ONEOK FIELD SERVICES

Completion Date	Plug Back Total Depth	Packer Set at
9/18/80	2434'	

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4-1/2"	9.50	4.090"	2434'	2330'	2342'

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
2-3/8"	4.7	1.995	2360'		

Type Completion (Describe)	Type Fluid Production	Pump Unit or Traveling Plunger?	Yes / No
Single Gas	Gas - Water	Pump	Yes

Producing Thru (Annulus/Tubing)	%Carbon Dioxide	% Nitrogen	Gas Gravity - G_g
Annulus			0.851

Vertical Depth (H)	Pressure Taps	(Meter Run)(Prover) Size
2336'	Flange	2.067"

Pressure Buildup: Shut In __11/7__ 20 _11_ at __7:00__ (AM)(PM) Taken __11/8__ 20 _11_ at __7:00__ (AM)(PM)

Well on line: Started _____ 20 ___ at _____ (AM)(PM) Taken _____ 20 ___ at _____ (AM)(PM)

OBSERVED SURFACE DATA
Duration of Shut-In 24.00

Static/ Dynamic Property	Orifice Size inches	*Circle one:* Meter or Prover Pressure psig	Pressure Differential in (h) Inches H₂0	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P_W) or (P_1) or (P_c) psig	Casing Wellhead Pressure (P_W) or (P_1) or (P_c) psia	Tubing Wellhead Pressure (P_W) or (P_1) or (P_c) psig	Tubing Wellhead Pressure (P_W) or (P_1) or (P_c) psia	Duration (Hours)	Liquid Produced (Barrels)
Shut-In						43.0	57.4	Pump		24.00	
Flow											

FLOW STREAM ATTRIBUTES

Plate Coefficient (F_b)(F_p) Mcfd	Meter Pressure psia	Press. Extension $\sqrt{P_m \times H_w}$	Gravity Factor F_g	Flowing Temperature Factor F_{ft}	Deviation Factor F_{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G_m

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_a)^2 = 0.207$

$(P_c)^2=$ _____ $(P_w)^2 =$ _____ $P_d=$ _____ % $(P_c - 14.4) + 14.4 =$ _____ $(P_d)^2 =$ _____

$(P_c)^2 - (P_a)^2$	$(P_c)^2 - (P_w)^2$	$\dfrac{P_c^2 - P_a^2}{(P_c)^2 - (P_w)^2}$	LOG $\left[\dfrac{(P_c)^2-(P_a)^2}{(P_c)^2-(P_w)^2}\right]$	Backpressure Curve Slope = "n"	n x LOG $\left[\dfrac{(P_c)^2-(P_a)^2}{(P_c)^2-(P_w)^2}\right]$	Antilog	Open Flow Deliverability Equals R x Antilog

Open Flow _____ Mcfd @ 14.65 psia   Deliverability _____ Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the __9th__ day of __November__ , __2011__

_____
Witness (if any)

_____
For Commission

_____
For Company

Checked by _____

I declare under penalty of perjury under the laws of the State of Kansas that I am authorized to request exempt status under Rule K.A.R. 82-3-304 on behalf of the operator LINN OPERATING, INC. and that the foregoing information and statements contained in this application form are true and correct to the best of my knowledge and belief based upon available production summaries and lease records of equipment installation and/or upon type of completion or upon use being made of the gas well herein named.

I hereby request a one-year exemption from open flow testing for the HCU 3231-B 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 incapable 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 Commission staff as necessary to corroborate this claim for exemption from testing.

Date: 11/9/2011

Signature: _____

Title: Regulatory Specialist

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 obtain exempt status for the gas well.

At some point during the succeeding calendar year, wellhead shut-in pressure shall have been measued 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 from 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.
it was a verified report of test results.