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

Type Test:

[✓] Open Flow

[ ] Deliverabilty

Test Date:
8/19/2013

API No. 15
15-067-21739-00-00

Company	Lease	Well Number
Linn Operating, Inc.	Rider	B-4 ATU-21

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
Grant	SE SE SE SE	15	27S	38 W	640

Field	Reservoir	Gas Gathering Connection
Hugoton-Panoma	Chase	Jayhawk Gas Plant

Completion Date	Plug Back Total Depth	Packer Set at
7/11/2013	2650	NA

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
5.5	15.5	4.95	3110	2375	2578

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
NA	NA	NA	NA	NA	NA

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

Producing Thru (Annulus / Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity - G_g
Annulus	.0740	15.725	.7270

Vertical Depth(H)	Pressure Taps	(Meter Run) (Prover) Size
	Flange	3.068

Pressure Buildup: Shut in __8/19__ 20 __13__ at __11:00 AM__ (AM) (PM) Taken __8/22__ 20 __13__ at __11:00 AM__ (AM) (PM)

Well on Line: Started __8/22__ 20 __13__ at __11:00 AM__ (AM) (PM) Taken __8/23__ 20 __13__ at __11:00 AM__ (AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in __72__ Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (Pm)	Pressure Differential in Inches H_2O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	psia	Tubing Wellhead Pressure (P_w) or (P_t) or (P_c) psig	psia	Duration (Hours)	Liquid Produced (Barrels)
Shut-In	1.25	26.1	0	70	70	26.1	40.5	NA	NA	72	0
Flow	1.25	22.4	15.2	70	70	22.4	36.8	NA	NA	24	0

FLOW STREAM ATTRIBUTES

Plate Coefficient (F_b) (F_p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	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
7.771	36.8	23.651	1.181	.9905	1	214.994	0	0

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 =$ __1.6403__ : $(P_w)^2 =$ __1.3542__ : $P_d =$ _____ % $(P_c - 14.4) + 14.4 =$ _____ : $(P_a)^2 =$ 0.207 $(P_d)^2 =$ _____

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" --- or --- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
1.4333	0.2860	5.011	.7	.85	0.5949	3.9350	846.0117

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 __20th__ day of __August__ , 20 __13__ .

Shawn Hildreth _Shawn Hildreth_

Witness (if any)   For Company

For Commission   Checked by