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

Type Test:

☐ Open Flow

☐ Deliverabilty

Test Date: **5-22-13**

API No. 15
071-20731-00-00

Company	Lease		Well Number
Horseshoe Operating, Inc.	Nickelson		2

County	Location	Section	TWP	RNG (E/W)	Acres Attributed
Greeley	SW	4	20S	39W	

Field	Reservoir	Gas Gathering Connection
Bradshaw	Winfield	DCP Midstream

Completion Date	Plug Back Total Depth	Packer Set at
10-10-2000	2917 TD	None

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4.5	10.5	4.052	2916	2814-19	2824-29

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
2.375	4.7	2.000			

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

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

Vertical Depth(H)	Pressure Taps	(Meter Run) (Prover) Size
	Flange	2"

Pressure Buildup: Shut in __5-21__ 20_13_ at _8:48_ (AM) (PM) Taken __5-22__ 20_13_ at _8:48_ (AM) (PM)

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

OBSERVED SURFACE DATA

Duration of Shut-in __24__ 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	.375						54.7			24	
Flow											

FLOW STREAM ATTRIBUTES

Plate Coeffiecient (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

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

$(P_a)^2 = 0.207$
$(P_d)^2 =$ _____

$(P_c)^2 - (P_a)^2$ 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)

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 __19__ day of __August__ , 20_13_.

Witness (if any) _____

For Commission _____

Janice Ripley

For Company

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 __Horseshoe Operating, Inc.__ and that the foregoing 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 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 __Nickelson 2__ 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 Commission staff as necessary to corroborate this claim for exemption from testing.

Date: __8-19-13__

Signature: __Janice Ripley__

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.