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

Type Test: 15-071-20185 - ----Open Flow Deliverabilty Well Number Lease 1-4 Monroe Company Horseshoe Operating, Inc. Acres Attributed RNG (E/W) TWP Section 640 Location 40W. County **18S** 4 SE NE SE Gas Gathering Connection Greeley Reservoir **DCP Midstream** Field Chase **Bradshaw** Packer Set at Plug Back Total Depth Completion Date None 2970 To 2/80 Perforations Internal Diameter Set at 2958 Weight 2924 Casing Size 3024 4.052 10.5 To 4.5 Perforations Set at Internal Diameter Weight Tubing Size 2960 1.995 4.7 Pump Unit or Traveling Plunger? Yes / No 2.375 Type Fluid Production Type Completion (Describe) Yes Water Gas Gravity - G Single Gas % Nitrogen % Carbon Dioxide Producing Thru (Annulus / Tubing) (Meter Run) (Prover) Size Annulus Pressure Taps Vertical Depth(H) lanae 3024 (AM) (PM) (PM) Taken Pressure Buildup: (AM) (PM) (AM) (PM) Taken 20. Started Well on Line: Hours Duration of Shut-in OBSERVED SURFACE DATA Tubing Casing Liquid Produced Duration | Pressure Wellhead Pressure Circle one Well Head Flowing Wellhead Pressure (Barrels) Orlfice (Hours)  $(P_w)$  or  $(P_t)$  or  $(P_c)$ Static / Differential Meter Temperature Temperature  $(P_w)$  or  $(P_t)$  or  $(P_c)$ Dynamic Size in Prover Pressure psig psia (inches) psig Inches H<sub>2</sub>0 Property psig (Pm) Shut-In Flow FLOW STREAM ATTRIBUTES Flowing GOR Metered Flow Flowing Devlation Fluid Gravity (Cubic Feet/ Press Plate Temperature Gravity Factor Meter or Extension Factor Barrel) (Mcfd) Coeffiecient Factor F G, Prover Pressure P<sub>m</sub>xh F. (F<sub>b</sub>) (F<sub>p</sub>) Mcfd F,, psia (OPEN FLOW) (DELIVERABILITY) CALCULATIONS  $(P_a)^2 = 0.207$  $(P_d)^2 =$  $(P_c - 14.4) + 14.4 =$ Open Flow Backpressure Curve Deliverability Slope = "n" OG of n x LOG 1. P.2-P.2 Antilog (P\_)2 - (P\_)2 Equals R x Antilog  $(P_c)^2 - (P_a)^2$ formula 1, or 2. -- OF----Assigned (Mcfd) 2. P.2-P.2 P.2-P.2 and divide Standard Slope (P<sub>a</sub>)<sup>2</sup> - (P<sub>a</sub>)<sup>2</sup> Mcfd @ 14.65 psia Deliverability Mcfd @ 14.65 psia Open Flow 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. RECEIVED Witness (if any) Checked by For Commission

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 Monroe 1-4
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: 10/25/10
Signature: <u>Janice Ripley</u> Title: <u>Production</u> 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.