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

| Type Test   | t:      |  |  |  | (  | See Instruct                      | tions on Reve   | erse Side  | )  |                             |                     |  |                              |   |  |
|---|---------|--|--|--|--|-----------------------------------|---|--|--|-----------------------------|---------------------|--|------------------------------|---|--|
| Op  | en Flo  | w  |  |  |  |                                   |   |  |  |                             |                     |  |                              |   |  |
| Deliverabilty   |         |  | Test Date:<br>08-05-2011                           |  |  |                                   |   | No. 15<br>077-20,565                                   | ~ (Y   | $\gamma \gamma$             | )                   |  |                              |   |  |
| Company<br>Hayes C  |         | Sas,   | LLC  |  |  |                                   | Lease<br>Kircher  |  |  |                             |                     | #2                                       | Veli Numi                    | <br>oer   |  |
| County Location HP 70'EofC N/2-N/2-NE                       |         |  | Section<br>8                                       |  |  |                                   | RNG (E/W)<br>9W   |  |  | Acres Attributed<br>80      |                     |  |                              |   |  |
| Fleid<br>Sharon   |         |  |  | Reservoir<br>Mississippi   |  |                                   | Gas Gathering Connection Pioneer Exploration LTD  |  |  |                             |                     |  |                              |   |  |
| Completion Date<br>03-25-1980                               |         |  | Plug Bac<br>4363'                                  | Plug Back Total Depth<br>4363'   |  |                                   | Packer S<br>None  | et at  |  |                             |                     |  |                              |   |  |
| Casing Size Weight 4.5 9.50                                 |         |  | t  | Internal C<br>4.090  | Diameter                                   |                                   | Set at Perfo<br>4389' 434   |  |  | forations To                |                     |  | <del></del> 50               |   |  |
| Tubing Size 2.375   |         |  |  | Weight<br>4.60   |  | Internal Diameter<br>1,995        |   | Set at<br>4348SN                                       |  | ations                      |                     | To<br>4353'                              |                              |   |  |
| Type Completion (Describe) Single                           |         |  | Type Fluid Production Water, Oil                   |  |  | Pump Unit or Traveling Plunger? Y |   |  |  | / No                        | <del></del>         |  |                              |   |  |
|   | Thru    | (Anı   | nulus / Tubing                                     | g)   |  | arbon Dloxi                       | de  |  | % Nitrog   |                             |                     | Gas Gre                                  | avity - G                    |   |  |
| Tubing  |         |  |  |  |  |                                   |   |  |  |                             |                     |  |                              |   |  |
| Vertical D<br>4403'   | epth(l  | <del>1</del> )                                     |  |  |  | Pres                              | sure Taps   |  |  |                             | ı                   | (Meter R                                 | Run) (Prov                   | rer) Size   |  |
| Pressure  | Bulldu  |  |  | 04 2   |  |                                   |   |  |  |                             |                     |  |                              |   |  |
| Well on L   | ine:    | 1  | Started 08-  | 05 2   | 0 <u>11</u> at <u>1</u>                    | 1:00                              | (AM) (PM) 1   | aken   |  | 20                          | at _                |  | (At                          | /I) (PM)  |  |
|   |         |  |  |  |  | OBSERVE                           | D SURFACE   |  |  |                             | Duration e          | of Shut-i                                | n                            | Hours   |  |
| Static / Orific<br>Dynamic Size<br>Property (Inches         |         | :0   | Circle one:<br>Meter<br>Prover Pressu<br>paig (Pm) | Pressure Differential in Inches H <sub>2</sub> 0   | Flowing Well Hear<br>Temperature Temperatu |                                   | Casing Wellhead Pressure (P <sub>e</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )  psig psia |  | Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>a</sub> ) psig psia |                             | Duration<br>(Hours) |  | Liquid Produced<br>(Barrels) |   |  |
| Shut-In   | ,       |  |  |  |  |                                   | 138   |  |  |                             | 24                  |  |                              |   |  |
| Flow  |         |  |  |  | •  |                                   |   |  |  |                             |                     |  |                              |   |  |
|   |         |  |  |  |  | FLOW STR                          | EAM ATTRIE  | UTES   |  |                             |                     |  |                              |   |  |
| Plate Coeffiecient (F <sub>b</sub> ) (F <sub>p</sub> ) Motd |         | Circle one:<br>Meter or<br>Prover Pressure<br>psia |  | Press<br>Extension<br>√ P <sub>m</sub> xh  | Extension Fac                              |                                   | tor Temperature   |  | lation<br>ctor<br>pv   | Metered Flow<br>R<br>(Mcfd) |                     | GOR<br>(Cubic Fee<br>Barrel)             |                              | Flowing<br>Fluid<br>Gravity<br>G_                           |  |
| L   |         |  |  |  |  |                                   |   | <u> </u>   |  |                             |                     | <del> </del>                             |                              |   |  |
| (P <sub>o</sub> ) <sup>2</sup> =                            |         | _:   | (P <sub>w</sub> )² =                               | :  | (OPEN FL                                   |                                   | ERABILITY) (P.  | CALCUL<br>- 14.4) +                                    |  | :                           |                     | (P <sub>e</sub> )²<br>(P <sub>d</sub> )² | = 0.207<br>=                 |   |  |
| $(P_a)^2 - (P_a)^2$<br>or<br>$(P_a)^2 - (P_d)^2$            |         | (P <sub>a</sub> )²- (P <sub>w</sub> )²             |  | hoose formula t or 2:  1. P <sub>e</sub> <sup>2</sup> - P <sub>e</sub> <sup>2</sup> 2. P <sub>e</sub> <sup>2</sup> - P <sub>e</sub> <sup>2</sup> wided by: P <sub>e</sub> <sup>2</sup> - P <sub>e</sub> <sup>3</sup> by: |  | P2-P2                             | Stope<br>   | ckpressure Curve Slope = "n"or Assigned Standard Slope |  | .oe [ ]                     | Antile              | Antilog                                  |                              | Open Flow<br>Deliverability<br>Equals R x Antilog<br>(Mcfd) |  |
|   | _       |  |  | <u></u>  |  |                                   |   |  |  |                             |                     |  |                              |   |  |
| Open Flow Mcfd @ 14.65 psia                                 |         |  |  |  |  | Deliverability                    |   |  |  | Mcfd @ 14.65 psia           |                     |  |                              |   |  |
| The   | unders  | ignec  | d authority, o                                     | n behalf of the  | Company, s                                 | tates that h                      | e is duly auti  | norized to   | make th  | e above repo                | rt and tha          | t he ha                                  | s knowled                    | ige of  |  |
| the facts s   | tated t | herei  | n, and that s                                      | ald report is true   | and correc                                 | t. Executed                       | this the  |  | day of   |                             |                     |  | , 20                         | <del></del>   |  |
|   |         |  | Wilness (i   | I any)   |  |                                   |   |  |  | For C                       | Отрелу              |  | REC                          | EIVED   |  |
| <del></del>   |         |  | For Comm   | ission   |  |                                   | _   |  |  | Chec                        | ked by              |  | AUG                          | 8 201   |  |

| exempt status under Rule K.A.R. 82-3-304 on be<br>and that the foregoing pressure information an<br>correct to the best of my knowledge and belief b | e laws of the state of Kansas that I am authorized to request half of the operator Hayes Oil & Gas, LLC d statements contained on this application form are true and ased upon available production summaries and lease records appletion or upon use being made of the gas well herein named.  Open flow testing for the Kircher *2 |
|--|--|
| (Check one) is a coalbed methane production is cycled on plunger lift due to   |  |
| is a source of natural gas for is on vacuum at the present t   | injection into an oil reservoir undergoing ER ime; KCC approval Docket No at a daily rate in excess of 250 mcf/D   |
| I further agree to supply to the best of my a staff as necessary to corroborate this claim for   | bility any and all supporting documents deemed by Commission exemption from testing.   |
| Date: 08-17-2011   |  |
| Signa  | ature:   |
|  |  |

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.

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