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

| = `  | :<br>en Flov<br>liverabi |   | J.,_                             |   |   | Test Date                                      |                               | ıcti   | ons on Reve  | erse Side,                             | AP   | l No. 15                    |                     |                             |  |   |                       |  |
|--|--------------------------|---|----------------------------------|---|---|--|-------------------------------|--|--|--|--|-----------------------------|---------------------|-----------------------------|--|---|-----------------------|--|
| Company  |                          |   | ATING OG                         |   | AND/ // O   | 10/1/14  |                               |  | Lease  |  | 15-  | -007-22799-                 | 00-0                | 1                           | Well Nur   | nber  | _                     |  |
| WOOLSEY OPERATING COMPANY, LLC  County Location Section            |                          |   |                                  |   |   |  |                               |  | TWP  | <u> </u>                               | RNG (E/W)  |                             |                     | 2 Acres Attributed          |  |   |                       |  |
| BARBER SE SE NW 2 Field Reservoir                                  |                          |   |                                  |   |   |  |                               |  | 348  |  | 11W Gas Gathering Connection                                     |                             |                     | on                          |  |   | _                     |  |
| ROUND  |                          |   | Ή<br>                            |   |   | MISSIS:  |                               |  |  |  | APC<br>Packer  | Eat at                      | _                   |                             |  |   | _                     |  |
| Completion Date Plug Back Total Dep 3/31/04 4759                   |                          |   |                                  |   |   |  |                               | ;pu  | ·  |  | NONE   |                             |                     |                             |  |   | _                     |  |
| Casing Size Weight 4.500 10.500                                    |                          |   |                                  |   | Internal Diameter 4.052                                   |  |                               | Set at<br>4759                                       |  | Perforations<br>4580                   |  |                             | то<br>4601          |                             |  |   |                       |  |
| Tubing Si<br>2.375   |                          |   |                                  |   |   |  | Internal Diameter<br>1.995    |  |  | Set at<br>4637                         |  | Perforations<br>OPEN        |                     | То                          |  |   | _                     |  |
| Type Completion (Describe)  SINGLE  Type Fluid Producti OIL, WATER |                          |   |                                  |   |   |  |                               | ion  |  |  | Pump Unit or Traveling Plung PUMPING                             |                             |                     | nger? Yes                   | ger? Yes / No                                      |   |                       |  |
| Producing  | Thru                     | (Anr  | nulus / Tubir                    | ıg)   |   |  | arbon Dic                     | xic  | le   |  | % Nitro  |                             |                     | Gas Gra                     | avity - G  | g   | _                     |  |
| ANNUL<br>Vertical D<br>4591  |                          | l)  |                                  |   | · <u> </u>  |  | Pro                           | ess  | ure Taps   |  |  |                             |                     | (Meter F                    | Run) (Pre  | over) Size                                    | <del></del>           |  |
| Pressure   | Buildu                   | p:  | Shut in _09                      | /30/  | 14 20   | at   |                               | _  | (AM) (PM)  | Taken_10                               | )/1/14   | 20                          |                     | at                          | (/   | AM) (PM)                                      | _                     |  |
| Well on Li   | ine:                     |   |                                  |   |   |  |                               |  |  |  |  | 20                          |                     |                             |  |   |                       |  |
|  |                          |   |                                  |   |   |  | OBSER                         | /EI  | SURFACE  | DATA                                   |  |                             | Dur                 | ation of Shut-              | in   | Нос   | urs                   |  |
| Static /<br>Dynamic<br>Property                                    | Orific<br>Size<br>(inche | ze Prover Pressi  |                                  | ure   | Pressure<br>Differential<br>in<br>Inches H <sub>2</sub> 0 | Flowing<br>Temperature<br>t                    | Well Head<br>Temperature<br>t |  | Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> ) |  | Tubing Wellhead Pressure $(P_w)$ or $(P_l)$ or $(P_c)$ psig psia |                             | Duration<br>(Hours) |                             | Liquid Produced<br>(Barrels)                       |   |                       |  |
| Shut-In  |                          | F-19 (1 111)  |                                  |   |   |  |                               |  | 300  | psia psi<br>160                        |  | psia                        | psia 24             |                             |  |   | 1                     |  |
| Flow   |                          |   |                                  |   |   |  |                               |  |  |  |  |                             |                     |                             |  |   |                       |  |
|  |                          |   | -                                |   |   |  | FLOW S                        | TRI  | EAM ATTRII   | BUTES                                  | •  | ,                           |                     |                             |  |   | <br>                  |  |
| Plate<br>Coeffieci<br>(F <sub>b</sub> ) (F<br>Mcfd                 | ent<br>,)                | Circle one:<br>Meter or<br>Prover Pressure<br>psia              |                                  |   | Press<br>Extension<br>✓ P <sub>m</sub> x h                | Gravity<br>Factor<br>F <sub>g</sub>            |                               | Flowing<br>Temperature<br>Factor<br>F <sub>I</sub> , |  | Deviation<br>Factor<br>F <sub>pv</sub> |  | Metered Flow<br>R<br>(Mcfd) |                     | GOR<br>(Cubic Fe<br>Barrel) | et/  | Flowing<br>Fluid<br>Gravity<br>G <sub>m</sub> |                       |  |
|  |                          |   |                                  | <u> </u>  |   | (OPEN FL                                       | OW) (DEL                      | IVE  | ERABILITY)   | CALCUL                                 | ATIONS   |                             |                     | (P <sub>a</sub> ):          | <sup>2</sup> = 0.20                                | )7  | ا                     |  |
| (P <sub>c</sub> ) <sup>2</sup> =                                   |                          | _:_   | (P <sub>w</sub> ) <sup>2</sup> : |   | so formula 1 or 2:  | P <sub>d</sub> ≈                               |                               | _%   |  | - 14.4) +                              | 14.4 = _   | <u>-</u> :                  | 1                   | (P <sub>d</sub> );          |  |   | 7                     |  |
| $(P_c)^2 - (P_b)^2$<br>or<br>$(P_c)^2 - (P_d)^2$                   |                          | (P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> |                                  | 1. $P_c^2 - P_a^2$<br>2. $P_c^2 - P_d^2$<br>divided by: $P_c^2 - P_w^2$ |   | LOG of formula 1. or 2. and divide by:  P.2-P. |                               |  |  | e = "n"<br>pr<br>gned n x              |  | LOG                         |                     | Antilog                     | Open Flow Deliverability Equals R x Antilog (Mcfd) |   |                       |  |
|  |                          |   |                                  |   |   |  |                               |  |  |  |  |                             |                     |                             |  |   |                       |  |
| Ones 55:   | <u>_</u>                 |   |                                  |   | Maid @ 11   | RE nois  |                               |  | Deliverabil  | (ia                                    |  |                             | Mar                 | d @ 14 85 ~-:               |  |   |                       |  |
| Open Flow  |                          | one.  |                                  |   | Mcfd @ 14.0   | -  | states that                   | he   |  | <u>*</u>                               | n make t   | he above rep                |                     | d @ 14.65 psi               |  | edne of                                       | _                     |  |
|  |                          | -   |                                  |   |   | • •  |                               |  | this the 15  |  |  | OCTOBER                     | اد <b>د</b>         | ina mar ne na               |  | o <u>14</u>                                   | <b>.</b> ·            |  |
|  |                          |   | Witness                          | (if anvi  | <u> </u>  |  |                               |  | _  | ter                                    | nk   | Kall.                       | Compa               |                             | (A <u>nsas</u> C                                   | Receiv<br>ORPORATI                            | /ed<br><u>эи</u> соми |  |
|  |                          |   |                                  |   |   |  |                               |  | _  |  |  |                             |                     | <i>7</i> ·                  | 0  | CI 27   | 2014                  |  |
|  |                          |   | For Com                          | rnissioi  | n   |  |                               |  |  |  |  | Chi                         | ecked I             | Jy                          | CONS   | ERVATION<br>WICHITA                           |                       |  |

| exempt status under<br>and that the forego<br>correct to the best | or penalty of perjury under the laws of the state of Kansas that I am authorized to request the Rule K.A.R. 82-3-304 on behalf of the operator WOOLSEY OPERATING CO., LLC bing pressure information and statements contained on this application form are true and of my knowledge and belief based upon available production summaries and lease records lation and/or upon type of completion or upon use being made of the gas well herein named. |
|---|--|
| · •   | st a one-year exemption from open flow testing for the POWELL A-2  |
|   | ounds that said well:  |
| _   | 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  to supply to the best of my ability any and all supporting documents deemed by Commission to corroborate this claim for exemption from testing.                       |
| Date: 10/15/14  |  |
|   | Signature: Win L. Mallay Q.  Title: FIELD MGR.   |

## 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.