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

|   | :<br>en Flo<br>liverat                   |   |   |   | (<br>Test Date                     |   | uctions on Rev                             | verse Side  | API                   | No. 15<br>-20948-00-0  | 00   |   |          |
|---|--|---|---|---|------------------------------------|---|--|---|-----------------------|--|--|---|----------|
| Company<br>Noble E                                | ,  |   | ·   |   |                                    |   | Lease<br>Zweyga                            | rdt   | 023                   | -20946-00-0  | -  | Well Number   |          |
| County Location Cheyenne SW-NE                    |  |   | on  | Section<br>32   |                                    | TWP   | TWP<br>3S                                  |   | RNG (E/W)<br>41W      |  | Acres Attributed                                   |   |          |
| Field   |  | Niot  | brara Gas A   | ·ea   | Reservoi                           |   |  |   | Gas Gat               | hering Conne<br>Morgan via I                                   | ection<br>ampe Compre                              | ssor  |          |
| Completic<br>3/27/200                             | on Dat                                   |   |   |   | Plug Bac<br>1548'                  | k Total De  | epth                                       | -   | Packer S<br>N/A       |  | <del>- · · · · · · · · · · · · · · · · · · ·</del> |   |          |
| Casing S 7", 4-1/2                                | ize Weight Internal Diameter Set at Perl |   |   |   | Perfo<br>138                       | rations<br>7'   | то<br>1444'                                |   | *********             |  |  |   |          |
|   | Tubing Size W                            |   |   | ht Inter  |                                    | Internal Diameter<br>1.991"                               |  | t<br> '   | Perforations          |  | То   |   |          |
| Type Completion (Describe) Single (Gas)           |  |   |   | Type Fluid Production<br>Saltwater  |                                    |   |  | Pump Unit or Traveling Plunger? Yes                       |                       |  | / No   |   |          |
| Producing Thru (Annulus / Tubing)                 |  |   |   | % Carbon Dioxide  |                                    |   |  | % Nitrogen  |                       | Gas Gravity - G <sub>g</sub>                                   |  |   |          |
| Vertical D  |  | H)  |   |   |                                    | Pro   | essure Taps                                |   |                       |  | (Meter F   | Run) (Prover) Si  | ze       |
| Pressure  | Buildu                                   | ıp:   | Shut in2/26   | S/2   | 09 at 8                            | :10   | (AM) (PM)                                  | Taken   |                       | 20   | at   | (AM) (PM  | ——<br>I) |
| Well on L   | ine:                                     |   | Started 2/27  | <u>'/                                    </u>   | 09 at 1                            | :10   | _ (AM)(PM)                                 | Taken   |                       | 20   | at   | (AM) (PM  | 1)       |
|   |  |   |   |   |                                    | OBSER\  | /ED SURFACE                                | DATA  |                       |  | Duration of Shut-i                                 | n_29Ho  | ours     |
| Static /<br>Dynamic<br>Property                   | Orifi<br>Siz<br>(inch                    | e   | Circle one:<br>Meter<br>Prover Pressur<br>psig (Pm) | Pressure Differential in Inches H <sub>2</sub> 0  | Flowing<br>Temperature<br>t        | Well Head<br>Temperatu<br>t                               | Wellhead I                                 | Pressure<br>) or (P <sub>c</sub> )                        | Wellhe                | ubing<br>ad Pressure<br>(P <sub>1</sub> ) or (P <sub>c</sub> ) | Duration<br>(Hours)                                | Liquid Produce<br>(Barrels)                                 | đ        |
| Shut-In   |  |   | , , ,   | 2   |                                    |   | 150  | psia  | psig                  | psia   |  |   |          |
| Flow  |  |   |   |   |                                    |   |  |   |                       |  |  |   |          |
| <del> </del>                                      | <del></del> 1                            |   |   |   | <del>-  </del>                     | FLOW S  | TREAM ATTRI                                | BUTES   | T                     | <u> </u>   |  |   | _        |
| Plate<br>Coeffiec<br>(F <sub>b</sub> ) (F<br>Mcfd | ient<br>,)                               | Pro   | Circle one:<br>Meter or<br>over Pressure<br>psia    | Press<br>Extension<br>✓ P <sub>m</sub> x h  | Grav<br>Fac                        | or  | Flowing Temperature Factor F <sub>11</sub> | Fa  | iation<br>ictor<br>pv | Metered Flow<br>R<br>(Mcfd)                                    | GOR<br>(Cubic Fee<br>Barrel)                       | Flowing<br>Fluid<br>Gravity<br>G <sub>m</sub>               |          |
|   |  | <u></u>   |   |   |                                    |   |  |   |                       |  |  |   | _]       |
| (P <sub>c</sub> ) <sup>2</sup> =                  |  | :   | (P <sub>w</sub> ) <sup>2</sup> =_                   | :   | (OPEN FLO                          | OW) (DEL  | IVERABILITY) % (P                          | CALCUL<br>- 14.4) +                                       |                       | <b>:</b>   | $(P_a)^2 (P_d)^2$                                  | = 0.207   |          |
| $(P_c)^2 - (P_a)^2$<br>or<br>$(P_c)^2 - (P_d)^2$  |  | (P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> |   | Choose formula 1 or 2:<br>1. $P_c^2 - P_a^2$<br>2. $P_c^2 - P_d^2$<br>(ivided by: $P_c^2 - P_w^2$ | LOG of formula 1. or 2. and divide | P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> | Backpres<br>Slop<br><br>Ass                | Backpressure Curve Slope = "n" or Assigned Standard Slope |                       | .og [ ]  | Antilog  | Open Flow<br>Deliverability<br>Equals R x Antilog<br>(Mcfd) |          |
|   |  | •   |   |   |                                    |   |  |   |                       |  |  | :<br>   | _        |
| Open Flor   | <u> </u>                                 |   |   | Mcfd @ 14.  | <br>65 psia                        |   | Deliverabi                                 | lity  |                       |  | Mcfd @ 14.65 psi                                   | a   |          |
|   |  | •   | in, and that sa                                     | id report is true   | and correc                         |   | ed this the 30                             |   |                       | ctober   | rt and that he ha                                  | s knowledge of<br>, 20 <u>09</u>                            |          |
|   |  |   | Witness (if   |   | •                                  | 052   | _  |   |                       |  | ompany<br>ked by                                   |   |          |

KCC WICHITA

| I declare und       | der penalty of perjury under the laws of the state of Kansas that I am authorized to request |  |  |  |  |  |  |  |
|---------------------|--|--|--|--|--|--|--|--|
| exempt status un    | der Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy, Inc.                        |  |  |  |  |  |  |  |
| and that the fore   | going pressure information and statements contained on this application form are true and    |  |  |  |  |  |  |  |
| correct to the bes  | st of my knowledge and belief based upon available production summaries and lease records    |  |  |  |  |  |  |  |
| of equipment inst   | allation and/or upon type of completion or upon use being made of the gas well herein named. |  |  |  |  |  |  |  |
| I hereby requ       | est a one-year exemption from open flow testing for the Zweygardt 32-32B                     |  |  |  |  |  |  |  |
| gas well on the g   | rounds that said well:   |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |
| (Checi              |  |  |  |  |  |  |  |  |
|                     | 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 foundly an a sure |  |  |  |  |  |  |  |  |
|                     | ee to supply to the best of my ability any and all supporting documents deemed by Commission |  |  |  |  |  |  |  |
| statt as necessa    | ry to corroborate this claim for exemption from testing.                                     |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |
| Date: 10/30/200     | <u>9</u>   |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |
|                     | Signature:   |  |  |  |  |  |  |  |
|                     | Title: Regulatory Specialist   |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |
|                     |  |  |  |  |  |  |  |  |

## 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.