KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

| Type Test | t: | | | | | (| See Instruct | tions on Re | verse Side | e) | | | | | |
|--|-------------------|---|---|--|--|---|---------------|--------------------------------------|--|-----------------------|--|----------------------|---|---|--|
| = ' | en Flo liverab | | | | | Test Date | · : | | | API N 15-01 | lo. 15 23-21225-(| 00-00 | | | |
| Company Noble Er | | Inc | | | | | | Lease Wiese | | | | 14-5 | Well Nur | nber | |
| County Location Cheyenne SE-NE-SW | | | Section V-SW 5 | | | TWP 4S | | | RNG (E/W) 41W | | Acres Attributed | | | | |
| Field Cherry C | | | | | | Reservoir Niobrara | | | | | ering Conn Star/Kind | ection fer Morgan | | | |
| Completic 9/16/201 | on Dat | е | | | | Plug Bac | k Total Dep | th | | Packer Se | | | | | |
| Casing Size 7", 4-1/2" | | | Weight 23#, 11.6# | | | Internal Diameter 9-7/8", 6-1/4" | | Set at 221, 1632' | | Perforations 1422' | | То 1472' | | | |
| Tubing Size 2-3/8" | | | Weight 4.7# | | | Internal Diameter | | Set at | | Perforations | | То | | | |
| Type Completion (Describe) | | | | Type Flui | d Production | n | | | | nger? Yes / No | | | | | |
| Single (gas) Producing Thru (Ann | | | nulus / Tubing) | | | Saltwater % Carbon Dioxide | | de | e | | Yes Rod Pun % Nitrogen | | Gas Gravity - G | | |
| Tubing Vertical D | Pepth(F | i) | | | | | Pres | sure Taps | | | | (Meter | Run) (Pr | over) Size | |
| Pressure | Buildu | ın: Sh | nut in | 13 | 2 | 13 _{at} 9 | :30 | (AM) (PM) | Taken | | 20 | at | | AM) (PM) | |
| Well on Line: | | | | | | 43 0.30 | | <u> </u> | | | | | at (AM) (P | | |
| | | | <u>.</u> | | | | OBSERVE | D SURFAC | E DATA | | | Duration of Shu | -in_24 | Hours | |
| Static / Dynamic Property | ynamic Size | | Circle one: Meter Prover Pressure | | Pressure Differential in | Differential Temperature | | Wellhead (P _w) or (F | Casing Wellhead Pressure (P _w) or (P ₁) or (P _c) | | Tubing Wellhead Pressure (P_w) or (P_1) or (P_c) | | Duration Liquid Produ (Hours) (Barrels) | | |
| Shut-In | | | psig (Prr | " | Inches H ₂ 0 | | | 78 | psia | psig | psia | | | | |
| Flow | | | | | | | | | | <u> </u> | | | | | |
| | | | | | | | FLOW STF | REAM ATTE | IBUTES | | | | | | |
| Plate Coeffiecient (F _b) (F _p) Mcfd | | Circle one: Meter or Prover Pressure psia | | Press Gra Extension Fai √P _m x h F | | | emperature Fa | | viation Metered Flov actor R F _{pv} (Mcfd) | | w GOF (Cubic F Barre | eet/ | Flowing Fluid Gravity G _m | | |
| | | | | | | (OPEN FL | OW) (DELIV | ERABILITY | ') CALCUI | LATIONS | | (P |) ² = 0.20 | | |
| (P _c) ² = | | _:_ | (P _w)² | = <u></u> | : | P _d = | | | P _c - 14.4) - | | <u></u> : | |) ² = | | |
| $(P_c)^2 - (P_p)^2$ or $(P_c)^2 - (P_d)^2$ | | (P _e) | (P _c) ² - (P _w) ² | | ose formula 1 or 2: 1. P _c ² - P _g ² 2. P _c ² - P _d ² led by: P _c ² - P _g ² | LOG of formula 1. or 2. and divida | P. 5 - P. 2 | Backpressure Curv Slope = "n" | | n x LOG | | Antilog | Deli Equals | en Flow verability R x Antilog Mcfd) | |
| | | | | | • | | | | | | | · | | | |
| L | | | | | | | | | | | | | | | |
| Open Flo | W | | | | Mcfd @ 14. | 65 psia | | Deliveral | bility | | | Mcfd @ 14.65 p | sia | | |
| | | • | • | | ehalf of the report is true | | | - | | | • | ort and that he h | | ledge of | |
| uie IdūlS S | naieu l | neren), | , anu liidi | oaiu | report is title | , and conec | LACCUICL | . ans tile | | Jay 01 | | | | VICHITA | |
| | | | Witnes | s (il an | y) | | | • | | | For | Company | | 1 2013 | |
| Marine Co. | | | F or Cor | nmissio | on | | | | | | Che | ecked by | | EIVED | |

| | are under penalty of perjury under the laws of the state of Kansas that I am authorized to request |
|-------------|--|
| | atus under Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy Inc |
| | ne foregoing pressure information and statements contained on this application form are true and |
| | the best of my knowledge and belief based upon available production summaries and lease records |
| | ent installation and/or upon type of completion or upon use being made of the gas well herein named. |
| | by request a one-year exemption from open flow testing for the Wiese 14-5 |
| gas well o | n 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 |
| | |
| l furth | er agree to supply to the best of my ability any and all supporting documents deemed by Commission |
| staff as ne | cessary to corroborate this claim for exemption from testing. |
| | |
| Date: 12/3 | 26/2013 |
| Date: | · · · · · · · · · · · · · · · · · · · |
| | |
| | |
| | La F. Land |
| | Signature: Lization ; |
| | Title: Regulatory Analyst |
| | · |
| | |

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 signed and dated on the front side as though it was a verified report of annual test results.

DEC 3 1 2013