RECEIVED

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

| Type Test | ı: | ™ • • • • • • • • • • • • • • • • • • • | . • | (| (See Instruct | tions on Reve | erse Side | ?) | | | | | |
|--------------------------------------|----------------------|---|---|------------------------|--|---|------------------------------------|---|---|--------------|--------------------------------|--|---|
| Open Flow | | | | Test Date | e: | | | | No. 15 | | | | |
| <u> </u> | liverabilty | | | | | | | | 023-20784 | 4-00-00 | | | |
| Company Noble Er | | С. | | | | Lease Zweygar | ease /weygardt | | | | 41-32 | Well Nur | mber |
| County Cheyenn | ne | Locatio NENE | 'n | Section 32 | | | | RNG (E/ 41W | RNG (E/W) 41W | | / | Acres A | Attributed |
| Field Cherry C | | | _ | Reservoir Niobrara | | - | | | thering Cor ern Star/Kir | | raan | *************************************** | |
| Completic 9/19/200 | on Date | | | Plug Bac 1610' | ck Total Dept | t h | | Packer S | | | | | |
| Casing Si 7", 4-1/2" | ize | Weight 17#, 9 | | Internal (| Internal Diameter 9-7/8", 6-1/4" | | Set at 305', 1655' | | Perforations 1434' | | To 1470' | | |
| Tubing Siz | | Weight 4.7# | <u> </u> | Internal I 1.995 | | Set at | | | Perforations | | То | | |
| Type Corr | | | | Type Flui | id Production | n | Pump Unit o | | | | | y No | |
| Single (| | nnulus / Tubing) | .\ | Saltwa % C | ater Carbon Dioxid | ide | Y % | | Kod 1 | <u> Yump</u> | Gas Gr | ravity - G | |
| tubing | j Imo _{(Fi} | Illulus / 100 | , | ~ - | Albon E.c. | ne | | % Nitrog | B11 | ı | uau | avny _ | ^t o |
| Vertical D | epth(H) | | | | Pres | sure Taps | | | | | (Meter F | Run) (Pr | rover) Size |
| Proceure | Buildup: | Shut in10/1 | | 13 _{at} 2 | ::30 | (AM) (PM) | ——— | | | a | | | ALAL (DIA) |
| Well on Li | | Started 10/2 | | 20 at 20 13 at | ∵ የብ | (AM) (PM) 1 | | | 20 | | | | |
| Weiron | ne: | Starteu | | 0 aı | | (AM)((FM) | laken | | | a. | | | AM) (PN) |
| | | | | | OBSERVE | D SURFACE | | • | · · · · · · · · · · · · · · · · · · · | Duratio | on of Shut-i | _{in 28} | Hours |
| Static / Dynamic | Orifice Size | Circle one: Meter | Pressure Differential | Flowing Temperature | Well Head | Casin Wellhead P | Pressure | Wellhea | Tubing ead Pressure | Duration | | | d Produced |
| Property | (inches) | Prover Pressur psig (Pm) | re in Inches H ₂ 0 | t | t | (P _w) or (P ₁) |) or (P _c) psia | (P _w) or (P _t) or (P _c | | (Hours) | | (8 | Barrels) |
| Shut-In | · | | | | | 110 | рач | PV | , po., | psia | | | |
| Flow | | | | | | | | | | 1_ | | | |
| | | | | | FLOW STR | REAM ATTRIE | BUTES | | | | | | |
| Plate Coefficeient $(F_b)(F_p)$ Mcfd | | Circle one: Meter or rover Pressure psia | Meter of Extension over Pressure | | Gravity Factor F _g | | emperature Fa | | iation Metered Flow ctor R F _{pv} (Mcfd) | | GOR (Cubic Feet/ Barrel) | | Flowing Fluid Gravity G _m |
| | | | <u></u> | | | | | | | | | | |
| (P _c) ² = | : | (P _w) ² = | : | (OPEN FLO | | /ERABILITY) % (P _e | CALCUL - 14.4) + | | : | | | i ² = 0.20 | |
| | | (P _c) ² - (P _w) ² | P _c) ² - (P _w) ² Choose formula 1 or 2 1. P _c ² - P _s ² 2. P _c ² - P _d ² | | LOG of formula 1. or 2. and divide P2.P2 | | ssure Curve e = "n" orsigned | e n x I | rod | A | ntilog | Open Flow Deliverability Equals R x Antilog (Mcfd) | |
| | | | divided by: $P_c^2 - P_w^2$ | 2 by: | <u> </u> | Stanuai | ard Slope | | Luc | | | ` | Meluj |
| | | | | | <u> </u> | | | +- | | + | | | |
| Open Flow | L | | Mcfd @ 14, | 65 osia | | Deliverabili | litv | | | Mcfd @ | 14.65 psi | ia | |
| | | ed authority, on | | | ritates that h | | - | nake th | a ahove te | | · · | | ladae of |
| | - | ed authority, on ein, and that sai | | | | • | | | | • | | | • |
| | | | • | | | | | | | | | | ~ ~ |
| | | Witness (if | any) | | | _ | | | F | or Company | ****** | Kt | CC WI CI |
| | | For Commis | ssion | | | | | | C | Checked by | | [| DEC 3 † 20 |
| | | | | | | | | | | | | _ | / - |

| | der penalty of perjury under the laws of the state of Kansas that I am authorized to request oder Rule K.A.R. 82-3-304 on behalf of the operator Noble Energy, Inc. |
|-----------------------|---|
| | egoing pressure information and statements contained on this application form are true and |
| | st of my knowledge and belief based upon available production summaries and lease records |
| of equipment ins | tallation and/or upon type of completion or upon use being made of the gas well herein named. |
| I hereby req | uest a one-year exemption from open flow testing for the Zweygardt 41-32 |
| | grounds that said well: |
| (Ched | ck 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 mct/D |
| I further agr | ee to supply to the best of my ability any and all supporting documents deemed by Commission |
| _ | try to corroborate this claim for exemption from testing. |
| | |
| Date: 12/26/13 | |
|)ate: <u>12/20/13</u> | |
| | |
| | |
| | Signature: |
| | Signature: 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. The form must be signed and dated on the front side as though it was a verified report of annual test results.

KCC WICHITA