KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

| iype iest: | | | • | | IUIIS UII NEV | | , | | | | |
|--|--|--|------------------------------------|---|--|---|--|--------------------------------|--|---|--|
| Open Flow Deliverabil | | | Test Date |): HRU 10-16 | 3 2012 | | | No. 15 3 07-21502- (| በሴብስ | | |
| Company SARY D. JACO | OBS | | 10-15 [] | | Lease HOAGL | AND | | ~·· | 1-21 | Well Number | |
| County Location BARBER S2 N2 SE | | Section 21 | | TWP 32S | | RNG (E/W) 14W | | | Acres Attributed | | |
| etd TUMPH | | Reservoir MISSIS | SIPPIAN | | Gas Gathering Con ONEOK | | ~ | ection | RECE | | |
| Completion Date 10-4-1982 | | | Plug Back 4840 | Plug Back Total Depth 4840 | | | Packer Set at NONE | | | RECE DEC 1 (KCC WIC | |
| Casing Size | • | | Internal Diameter 3.927 | | Set at 4819 | | Perforations 4702 | | To 4712 | KCC IAU | |
| ubing Size | | | Internal Diameter | | Set at 4725 | | Perforations | | То | TOC VVIC | |
| Type Completion (Describe) | | | d Production | | | | | ng Plunger? Yes / No | | | |
| Producing Thru (| (Annulus / Tubi | ng) | % C | arbon Dioxi | de | | % Nitrog | en | Gas G | ravity - G _g | |
| ANNULUS /ertical Depth(H) | | | | Pressure Taps | | | | (Meter Run) (Prover) Size | | | |
| Pressure Buildup | o: Shut in 10 | ⊢1 5 ₂ | 0 12 at 9: | :30 AM | (AM) (PM) | Taken_1(|)-16 | 20 | 12 _{at} 10:00 | AM_ (AM) (PM) | |
| Vell on Line: | Started | 2 | 0 at | | (AM) (PM) | Taken | | 20 | at | (AM) (PM) | |
| | | | | OBSERVE | D SURFACE | DATA | | | Duration of Shut | -in Hours | |
| Static / Orific Dynamic Size Property (inche | Prover Press | Differential in | Flowing Temperature t | Well Head Temperature t | Casing Wellhead Pressure (P _w) or (P _t) or (P _c) | | Tubing Wellhead Pressure (P_{ψ}) or (P_1) or (P_c) | | Duration (Hours) | Liquid Produced (Barrels) | |
| Shut-In | psig (Pm |) Inches H ₂ 0 | | | pstg 10 | psla | psig | psia | 24 | | |
| Flow | | | | | | | | | | | |
| | | <u> </u> | | FLOW STR | EAM ATTRI | BUTES | ····· | | | | |
| Plate Coefficcient (F _b) (F _p) Mcfd | Circle one: Meter or Prover Pressure psia | Press Extension P _m x h | Fact | Gravity Factor F _g | | Flowing Deviation mperature Factor Factor F, F, | | Metered Flow R (Mcfd) | GOR (Cubic Fe Barrel) | eet/ Fluid | |
| | | | (OPEN 5) | OWD (DELB) | EDADE FO | | ATIONO | | | | |
| 'c)² = | _: (P _w)² | =: | P _d = | • • | ERABILITY) % (P | ; - 14.4) + | | : | (P _a) (P _d) |) ² = 0.207) ² = | |
| $(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$ | (P _c)²- (P _w)² | Choose formula 1 or 2 1. P _c ² -P _a ² 2. P _c ² -P _d ² divided by: P _c ² -P _w | LOG of formula 1. or 2. and divido | P _c ² · P _* ² | Stop | ssure Curve e = "n" or signed ard Slope | nxl | og [| Antilog | Open Flow Deliverability Equals R x Antilog (Mcfd) | |
| | | | | | | | | | | | |
| Open Flow | Mcfd @ 14.65 | | 65 psia | 5 psia | | Deliverability | | Mcfd @ 14.65 psia | | | |
| - | gned authority, | on behalf of the | Company, s | states that h | e is duly au | thorized to | o make th | e above repo | rt and that he ha | as knowledge of | |
| e facts stated th | erein, and that | said report is tru | and correct | t. Executed | this the 15 | ST | day of N | OVEMBER | | , 20 12 | |
| | Witness | (if any) | | | | <u> </u> | 丛 | £. & | cols | | |
| | For Corr | nmission | | | | | | Chec | oked by | | |

DEC 1 8 2012

KCC WICHITA

| Lelania | a under condity of notices under the lowe of the state of Kapana that I am outhorized to request | | | | | | | |
|---------------|--|--|--|--|--|--|--|--|
| | re under penalty of perjury under the laws of the state of Kansas that I am authorized to request us under Rule K.A.R. 82-3-304 on behalf of the operator GARY D. JACOBS | | | | | | | |
| | e foregoing pressure information and statements contained on this application form are true and | | | | | | | |
| correct to th | e best of my knowledge and belief based upon available production summaries and lease records | | | | | | | |
| | nt installation and/or upon type of completion or upon use being made of the gas well herein named. y request a one-year exemption from open flow testing for the HOAGLAND 1-21 | | | | | | | |
| | the grounds that said well: | | | | | | | |
| , | Check one) | | | | | | | |
| 1 | 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 | | | | | | | |
| | | | | | | | | |
| | r agree to supply to the best of my ability any and all supporting documents deemed by Commissio | | | | | | | |
| staff as nec | essary to corroborate this claim for exemption from testing. | | | | | | | |
| | | | | | | | | |
| Date: 11-1- | 2012 | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | Signature: A. D. O. c. La | | | | | | | |
| | Signature: | | | | | | | |

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.