KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

| Type Test: | | RE | CEIVED | | (See In | struc | tions on Re | everse Side | , | | | | | |
|--|-----------------------|--------------------------------|--|---|------------------|-----------------------|--|--------------------------|-------------|--|-----------------|------------------|---|--|
| | en Flow iverabilty | | B 1 3 2003 | Test Date | |)/7 | /02 | | API | No. 15 | 5-181-2C | 009/ | <u>-</u> - - - - - - - - - - - - | |
| Company | | VC | WICHIT | A | 1,2 | - / / | / UZ Lease | | | | 10.010 | | Number | |
| | o Pro | n on Saucti | on, Inc. | | | | Schwei | ndenei | : | * . | | 1_ | 36 | |
| County | | | ation | Section | | | TWP | | RNG (E/ | W) | | . Acres | Attributed | |
| Sherm | an | SW | NESE | 36 | | <u>.</u> | 7s | | _39W | <u></u> | | | | |
| Field | | | | Reservoi | | | | | Gas Gath | nering Conn | | | | |
| Goodl | and (| Gas | -0 | Niobr Plug Bac | ara | Donth | | | Packer S | | r-Morgan | | | |
| Completion | n-Dater 3 | 1-7-8 | 0 | | 1000 | | ı | | racker 5 | | | | | |
| Casing Size Weight | | | Internal Diameter | | | Set at | | Perforations | | То | | | | |
| 2.875 | | | | *************************************** | | | | | 94 | 18 | 980 | | | |
| Tubing Siz | | Weig | ght | Internal [| Diameter | r | Set a | at | Perfo | rations | To | | | |
| | | | | | | | | | | | | | | |
| Type Comp | pletion (D | escribe) | | Type Flui | id Produ | ction | | | Pump Un | it or Travelin | g Plunger? Ye | s / No | | |
| Producing Thru (Annulus / Tubing) | | | | % Carbo | % Carbon Dioxide | | | | % Nitroge | en | Gas Gravity - G | | | |
| Vertical De | mb// /P- | | | | = A | e se se | A P. | ···· | | | (Mete | er Run) (| Prover) Size | |
| | , , , | 100 | "differe | ntial. | 100 | 1b | . stat | tic. s | a. ro | ot cha | rts | 2"r | meter r | |
| | | | | | | | | | | | | | _ | |
| Pressure B | | | 2/219 | | | - | | | | | | | | |
| Vell on Lin | ie: : | Started1 | 2/519 | 02 at 1 | 2.00 | (| (AM) PIV) | Taken 12 | 2/7 | 19 | 02 at | :30 | (AM)(PM) | |
| | | | | | OBSE | RVE | D SURFAC | E DATA | | | Duration of Sh | ut-in_7 | 4 Hour | |
| Static / | Orifice | Circle one: | 1 | Flowing | Well Head | | Casing Wellhead Pressure (P _w) or (P ₁) or (P _c) | | | ubing | Duration | Lig | Liquid Produced (Barrels) | |
| Dynamic Size P | | Meter of Prover Press | | Temperature | 1 ' | ature | | | | d Pressure (P ₁) or (P _c) | (Hours) | | | |
| roperty | inches | psig | Inches H ₂ 0 | t | t | | psig | psia | psig | psia | | <u> </u> | | |
| Shut-In | .1875 | 22 | | | | | 22 | 35 | | | 74 | | 0. | |
| _ | | 22 | - | | | | | | | | | _ | | |
| Flow | 1875 | 10_ | | | ļ | | 9 | 22 | | | 46.5 | | 0 | |
| | | _ | | | FLOW | STR | EAM ATTR | IBUTES | | | | | | |
| Plate Coefficient (F) (F) Prover Pressure | | Press | Gravity | | Flowing | | Devi | ation | Metered Flo | w Go | R | Flowing | | |
| | | | Extension | Factor | | Temperature Factor | | Fac | ctor | R | (Cubic | | et/ Fluid Gravity | |
| (F _b) (F _p) Mcfd | ''' | psia | √ P _m x H _w | F. | , | | Fn | F | pv | (Mcfd) | Barr | ei) | G _m | |
| 222 | | .4 5 | 14.66 | 1 1 0 | ^ | 1 | 0.0 | 1 0 | | 2 27 | N/A | | N/a | |
| . 223 | 4 | 21.5 | 14.66 | 1.0 | | 1. | | 1.0 | | 3.27 | IN/A | | IN/a | |
| | | | | (OPEN FLO | OW) (DE | ELIVE | RABILITY |) CALCUL | ATIONS | | | $(a_a)^2 = 0$ | .207 | |
| ,)2 = 1 . | <u> 225 :</u> | (P _w) ² | = <u>.484</u> : | P _d = | | % | , (F | ² c - 14.4) + | 14.4 = | : _ | (F |) ² = | | |
| (P _c) ² - (P _a) ² (P _c) ² - (P _a | | \2_(P\2 | Choose formula 1 or 2: 1. P _c ² · P _a ² | LOG | LOG of | | Backpressure Curve | | | Γ٦ | , | | Open Flow | |
| or | | ر ۱۰ ۱۰ ۱۳ ۱۰ | 2. P.2. P.2 | formula 1. or 2. | | 1 | Slope = "n" | | n x LOG | | Antilog | | eliverability als R x Antilog | |
| (P _c) ² - (P _d) |)² | | divided by: P2 - P2 | and divide by: | P.2. P. | ,2 | | signed ard Slope | ł | LJ | | | Mcfd | |
| | | | | | <u> </u> | | | | | 4473 | 1 210 | 4.28 | | |
| 1.018 | .7 | 41 | 1.374 | .1380 | | .850 | | 50 | .1173 | | 1.310 | | 4.20 | |
| | | | | | | | | | | | | | | |
| non Ele | | 20 | Mcfd @ 14.6 | 5 neia | | | Deliverabil | itv | | | Mcfd @ 14.65 p | sia | | |
| pen Flow The und | | 28 authority, or | n behalf of the Co | | es that l | he is | | | ke the abo | ***** | | | of the facts | |
| | | | is true and corre | | | | | day of | | anuary | | | 192003. | |
| | , | | | | | | | $\dot{\cap}$ | | ander | c | | | |
| | | 146: | tit onu) | | | | _ | —J.J | mn_ | SUL KURS | Company | | | |
| | | Witness | (ii any) | | | | | \bigcup | | FUL | | | • • | |

For Commission

Checked by

| l declare | e under penalty or perjury under the laws of the state of Kansas that I am authorized to request |
|-----------------|--|
| exempt statu | us under Rule K.A.R. 82-3-304 on behalf of the operator <u>Lobo Production</u> , <u>Inc</u> . |
| and that the | foregoing information and statements contained on this application form are true and correct to |
| the best of n | ny knowledge and belief based upon gas production records and records of equipment installa- |
| tion and/or o | of type completion or upon use of the gas well herein named. |
| l hereby | request a permanent exemption from open flow testing for the <u>Schwendener 1-36</u> |
| gas well on t | the grounds that said well: |
| | |
| (0 | 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 incapable of producing at a daily rate in excess of 150 mcf/D |
| | |
| | |
| | |
| Date: <u>Ja</u> | nuary20, 2003 |
| ı | |
| | |
| | |
| | |
| | \bigcap 4 \subseteq 4 \subseteq |
| | Signature: |
| | Title: President |
| | |
| | |
| | |

Instructions:

All active gas wells must have at least an original G-2 form on file with the conservation division. If a gas well meets 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 obtain a testing exemption.

At some point during the succeeding calendar year, wellhead shut-in pressure shall be 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.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than thirty (30) days after the taking of the pressure reading. The form must be signed and dated on the front side as though it was a verified report of test results.