KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

| Type Test: | | | | | | (: | See Ins | tructio | ons on Re | verse Side | e) | | | | | | |
|--|-------------|---|----------------------------------|---|--|---|--------------------|---|---|---|--|---------------------------------------|---------------------|------------------------------|------------------------------|---|--|
| Оре | en Flow | | | | | Test Date | | | | | ۸DI | No. 15 | | | | | |
| Deli | iverabil | ty | | | | 12/15/1 | | | | | | 5-20,522 <i>~ (</i> | 200 | \mathcal{O} | | | |
| Company Oil Produ | ıcers,lı | nc. | of Kansas | • | A Company of the Comp | | | | Lease Joyce Z | Zook | | | | 1 | Well Nu | ımber | |
| County Location Pawnee SW SW SE | | | E | Section 9 | | | TWP 23S | RNG (E/W) 16W | | (W) | | | Acres / | Attributed | | | |
| | | | | | Reservoir Conglomerate | | | Gas Gathering Conn Lumen Energy | | | ection | | | | | | |
| Completion Date | | | Plug Back 4082 | Plug Back Total Depth 4082 | | | Packer Set at none | | Set at | | | | | | | | |
| Casing Siz | ze | Weight | | | | Internal Diameter | | | Set at 4130 | | Perforations 4023 | | то 4029 | | | | |
| Tubing Size Weight 2.375 | | | Internal Diameter | | | Set at 4042 | | Perforations | | | То | | | | | | |
| | | | | Type Fluid | Type Fluid Production SW | | | | | Pump Unit or Traveling Plunger? yes-pump unit | | | Yes / No | | | | |
| | Thru (| Anr | nulus / Tubin | g) | | % C | arbon D | Dioxid | e | | % Nitrog | jen | | Gas G | ravity - | 3 _g | |
| annulus Vertical De | epth(H) | | | | | | F | Press | ure Taps | | | | | (Meter | Run) (P | rover) Size | |
| | | | | | | | | | | | | | | | | | |
| Pressure E | Buildup | : : | Shut in 12/ | 14 | 2 | 0_10_at_1: | :00PM | <u> </u> | (AM) (PM) | Taken_12 | 2/15 | 20 | 10 at | 1:00P | <u>M</u> | (AM) (PM) | |
| Well on Lir | ne: | : | Started | | 20 | 0 at | | | (AM) (PM) | Taken | | 20 | at | · | | (AM) (PM) | |
| | | | | | | | OBSE | RVEC | SURFAC | E DATA | | | Duratio | on of Shut | -in 24 | Hours | |
| Static / Orific | | e Prover Pressu | | ure | Pressure Differential in | Flowing Well Heat Temperature Temperat | | ead | Casing Wallhead Pressure | | Tubing Wellhead Pressure (P _w) or (P ₁) or (P ₂) | | Duration (Hours) | | Liquid Produced (Barrels) | | |
| Property | (inche | s) | psig (Pm) | | Inches H ₂ 0 | t | t | | psig | psia | psig | psia | • | | | | |
| Shut-In | | | | | | | | | 213 | 227.4 | | | 24 | | | | |
| Flow | | | | | | | | | | | | | | | | | |
| | - | | | | | *************************************** | FLOW | STRE | EAM ATTR | RIBUTES | | | | | | | |
| Plate Coeffiecte (F _b) (F _p Mcfd | ent | Girde one: Meter or Prover Pressure psia | | l l | Press Extension ✓ P _m x h | Gravity Factor F _e | | Flowing Temperature Factor F _{rt} | | Fa | viation actor F _{pv} | Metered Flow R (Mcfd) | | GOR (Cubic Fee Barrel) | | Flowing Fluid Gravity G _m | |
| | | | | | | (OPEN FLO | OW) (DE | LIVE | RABILITY | /) CALCUI | ATIONS | | | (P |) ² = 0.2 | 207 | |
| (P _c) ² = | | _: | (P _w) ² = | | : | P _d = | | % | b (1 | P _c - 14.4) + | + 14.4 = _ | · | | |) ² = | | |
| (P _c) ² - (P or (P _c) ² - (P | | (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 ² | | LOG of formula 1. or 2. and divide by: | | 2 | Backpressure Curve Slope = "n" or Assigned Standard Slope | | l n x | LOG | A | ntilog | De Equal | Open Flow Deliverability Equals R x Antilog (Mcfd) | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| Open Flow | | | | | Mcfd @ 14. | ': | | | Deliveral | | | · · · · · · · · · · · · · · · · · · · | - | 14.65 ps | | | |
| • | _ | | | | | | | | | | | he above repo | rt and | that he h | | | |
| he facts st | ated th | erei | n, and that s | aid ı | report is true | e and correc | t. Exec | uted | this the <u>1</u> | i/th | day of L | December 1. #/ | | | RE | 20 10 CEIVED | |
| | | | Witness | if any | /) | | | | , | | <u> </u> | GIML FOR | Company | | JAI | 1 3 1 2011 | |
| | | | For Comi | nissio | on | | | | | | | Che | cked by | | | WICHIT | |

| exempt and that correct of equip | eclare under penalty of perjury under the laws of the state of Kansas that I am authorized to request status under Rule K.A.R. 82-3-304 on behalf of the operator Oil Producers, Inc. of Kansas at the foregoing pressure information and statements contained on this application form are true and to the best of my knowledge and belief based upon available production summaries and lease records oment installation and/or upon type of completion or upon use being made of the gas well herein named. The production is application of the gas well herein named. The production is application from open flow testing for the Source Zook #1 |
|---|--|
| gas we | ll on the grounds that said well: |
| | 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 rther agree to supply to the best of my ability any and all supporting documents deemed by Commission necessary to corroborate this claim for exemption from testing. |
| Date: _1 | 2/17/10 |
| | Signature: Title: |

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

KCC WICHITA