Kansas Corporation Commission One Point Stabilized Open Flow or Deliverability Test

| Type Test | t: | | | | (| See Instruct | tions on Rev | erse Side |) | | | | | |
|--|--------------|---|---|--|---|--|--|--|--|-------------------------------|-------------------------------|---|---|--|
| Open Flow | | | | Tool Date: | | | | • 50 | No. 45 | | | | | |
| Deliverabilty | | | | Test Date 01/04/20 | API No. 15 15 -175-22152 -0 | | | | 0000 | | | | | |
| Company MERIT E | | .GY | COMPANY | | Lease FRANZ LAND C | | | OMPAN | Y | | Well Number 7-B22-31-33 | | | |
| County Location SEWARD SW SW NW NE | | | | Section 22 | | | | RNG (E/W) 33W | | Acres Attributed 640 | | | | |
| Field FRANZ-TOLAND | | | | | Reservoi | | | | Gas Gar ONEO | hering Conn K | ection | | 400 | |
| Completion Date 12/04/2008 | | | | Plug Bac 5706 | k Total Dept | h | Packer 5448 | | Set at | | | | | |
| Casing Size Wo | | | | t | Internal E 4.950 | Internal Diameter 4,950 | | Set at 5812 | | rations 5 | то 5468 | | | |
| Tubing Si | ize | | Weight 4.7 | | Internal Diameter 1.995 | | Set at 5403 | | Perforations | | То | | | |
| Type Completion (Describe) SINGLE-GAS | | | | Type Flui | d Production | 1 | Pump Unit NO | | nit or Traveling | r Traveling Plunger? Yes / No | | | | |
| Producing Thru (Annulus / Tubing) ANNULUS | | | | % Carbon Dioxide | | | | % Nitrog | ien | Gas Gr | Gas Gravity - G _g | | | |
| Vertical Depth(H) | | | | | 70 Pressure Taps | | | | | | (Meter I | Run) (Pr | over) Size | |
| 5462 | | | | FLANGE | | | | | | 3.068 | , , | | | |
| Pressure Buildup: S | | | Shut in 01/ | 2 | 20 15 at 8 | 00 AM | (AM) (PM) | Taken_01 | /05 | 20 | 15 at 8:00 A | <u>M</u> (/ | AM) (PM) | |
| Well on L | ine: | | Started | 2 | 20 at | | (AM) (PM) | Taken | | 20 | at | (/ | AM) (PM) | |
| | | | r | | | OBSERVE | D SURFACE | | _ | | Duration of Shut- | in 24 | Hours | |
| Static / Dynamic Property | Dynamic Size | | Circle one: Meter Prover Press psig (Pm) | Pressure Differential In Inches H ₂ 0 | Flowing Well Head Temperature t t | | Casing Wellhead Pressure $\langle P_w \rangle$ or $\langle P_t \rangle$ or $\langle P_c \rangle$ psig psia | | Tubing Wellhead Pressure (P _w) or (P _t) or (P _c) psig psia | | Duration (Hours) | Liquid Produced (Barrels) | | |
| Shut-In | Shut-In | | | | | | | рыа | psig | psia | 24 | | | |
| Flow | | | | | | | | | | | | | | |
| | | | | | | 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 _o | | Flowing Deviation Factor For Fit For Formula Factor For For Formula Factor For Formula Factor For Formula Factor For For For Formula Factor For For For For For For For For For F | | Metered Flow R (Mcfd) | v GOR (Cubic Fe Barrel) | et/ | Flowing Fluid Gravity G _m | |
| | | | | | | | | | | | | | | |
| | | | | | (OPEN FLO | OW) (DELIV | ERABILITY) | CALCUL | ATIONS | | (P _a) | ² = 0.20 | 7 | |
| (P _c) ² = | | _: | (P _w) ² = | | P _d = | ° | % (P _c | - 14.4) + | 14.4 = _ | <u>:</u> | (P _d) | = | | |
| $(P_c)^2 - (P_a)^2$ 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 divide | formula 1. or 2. and divide p.2. p.2 | | Backpressure Curve Slope = "n" or Assigned Standard Slope | | LOG | Antilog | Antilog Cpen Flo Deliverab Equals R x / (Mcfd) | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Open Flow Mcfd @ 14.65 psia | | | | .65 psia | Deliverability | | | Mcfd @ 14.65 psia | | | | | | |
| | | _ | • | n behalf of the | • • | | - | | | ne above repo lovember | rt and that he ha | | edge of 0 <u>15</u> . | |
| | | | | • | | Rec | eived | | Me | rit Energy (| Company | | | |
| Witness (if any) | | | | | KAN | KANSAS CORPORATION COMMISSION | | | For Company Katherine McClurkan | | | | | |
| For Commission | | | | | | DEC 0 2 201 5 | | | | Checked by | | | | |

| I declare under penalty of perjury under the laws of the state of Kansas that I am authorized to request exempt status under Rule K.A.R. 82-3-304 on behalf of the operator Merit Energy Company and that the foregoing pressure information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon available production summaries and lease records of equipment installation and/or upon type of completion or upon use being made of the gas well herein named. I hereby request a one-year exemption from open flow testing for the Franz Land Company 7-B22-31-33 | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|
| gas well on the grounds that said well: | | | | | | | | | | |
| (Check one) is a coalbed methane producer is cycled on plunger lift due to water is a source of ■atural 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 I further agree to supply to the best of my ability any and all supporting documents deemed by Commission staff as necessary to corroborate this claim for exemption from testing. | | | | | | | | | | |
| Date: November 30, 2015 | | | | | | | | | | |
| Signature: Katherine McClurkan Yalware McClurkan Received KANSAS CORPORATION COMMISSION Title: Regulatory Analyst DEC 0 2 2015 | | | | | | | | | | |
| CONSERVATION DIVISION WICHITA, KS | | | | | | | | | | |

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.