

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow
 Deliverability

Test Date:
5/1/2015

API No. 15
053-21136-0000

| | | | | | | |
|--|----------------------------------|------------------------------------|----------------|--|---------------------------|---------------------------------------|
| Company Trek AEC, LLC | | Lease Johnson | | | Well Number 1-15 | |
| County Ellsworth | Location 2310' FSL & 300' FEL | Section 15 | TWP 16S | RNG (E/W) 7W | Acres Attributed 320 | |
| Field Wildcat | | Reservoir Grand Haven | | Gas Gathering Connection American Energies Pipeline | | |
| Completion Date 09/12/2004 | | Plug Back Total Depth 1912 1964 | | Packer Set at None | | |
| Casing Size 4.5 | Weight 9.5 | Internal Diameter 4.090 | Set at 1955 | Perforations 1774 | To 1791 | |
| Tubing Size 2.375 | Weight 4.7 | Internal Diameter 1.995 | Set at 2077 | Perforations 1774 | To 1791 | |
| Type Completion (Describe) Single Gas | | Type Fluid Production Gas | | Pump Unit or Traveling Plunger? Yes / No No | | |
| Producing Thru (Annulus / Tubing) Casing | | % Carbon Dioxide .0450 | | % Nitrogen 33.0229 | | Gas Gravity - G _g .7045 |
| Vertical Depth(H) 1782 | | Pressure Taps Flange | | | (Meter Run) (Prover) Size | |
| Pressure Buildup: Shut in <u>5/1</u> 20 <u>15</u> at <u>8 AM</u> (AM) (PM) Taken _____ 20 _____ at _____ (AM) (PM) | | | | | | |
| Well on Line: Started <u>5/2</u> 20 <u>15</u> at <u>8:00 AM</u> (AM) (PM) Taken _____ 20 _____ at _____ (AM) (PM) | | | | | | |

OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

| Static / Dynamic Property | Orifice Size (Inches) | Circle one: Meter Prover Pressure psig (P _m) | Pressure Differential in Inches H ₂ O | Flowing Temperature t | Well Head Temperature t | Casing Wellhead Pressure (P _w) or (P ₁) or (P _c) | | Tubing Wellhead Pressure (P _w) or (P ₁) or (P _c) | | Duration (Hours) | Liquid Produced (Barrels) |
|---------------------------|-----------------------|---|--|-----------------------|-------------------------|--|------|--|------|------------------|---------------------------|
| | | | | | | psig | psia | psig | psia | | |
| Shut-In | .375 | | | | | 150 | | 150 | | 24 | 0 |
| Flow | | | | | | | | | | | |

FLOW STREAM ATTRIBUTES

| Plate Coefficient (F _b) (F _p) Mcfd | Circle one: Meter or Prover Pressure psia | Press Extension $\sqrt{P_m \times h}$ | Gravity Factor F _g | Flowing Temperature Factor F _t | Deviation Factor F _{pv} | Metered Flow R (Mcfd) | GOR (Cubic Feet/ Barrel) | Flowing Fluid Gravity G _m |
|--|--|---------------------------------------|-------------------------------|---|----------------------------------|-----------------------|--------------------------|--------------------------------------|
| | | | | | | | | |

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = _____ : (P_w)² = _____ : P_d = _____ % (P_c - 14.4) + 14.4 = _____ : (P_a)² = 0.207
(P_d)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 ² | LOG of formula 1, or 2, and divide by: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$ | Backpressure Curve. Slope = "n" ----- Assigned Standard Slope | n x LOG [] | Antilog | Open Flow Deliverability Equals R x Antilog (Mcfd) |
|--|---|---|--|---|-------------|---------|--|
| | | | | | | | |

Open Flow _____ Mcfd @ 14.65 psia Deliverability 19 Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 5 day of July, 20 15.

Received
KANSAS CORPORATION COMMISSION

Mark Bieker

Witness (if any) _____
For Commission _____
JUL 10 2015
CONSERVATION DIVISION
WICHITA, KS

For Company
Mark Bieker, Operations Director
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 Trek AEC, LLC 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 Johnson 1-15 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 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

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: 7/5/2015

Signature: Mark Bieker

Title: Mark Bieker, Operations Director

Received
KANSAS CORPORATION COMMISSION

JUL 10 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.