

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow
 Deliverability

(See Instructions on Reverse Side)

Test Date:

API No. 15

181-20256-00-00

| | | | | | | | | |
|---|--------------------------|---------------------------------------|----------------------------------|---------------------------------------|---|------------------------------------|---|--|
| Company Lobo Production, Inc. | | | Lease City of Goodland | | | Well Number 1-8 | | |
| County Sherman | Location NW NW | Section 8 | TWP 8S | RNG (E/W) 39W | Acres Attributed | | | |
| Field Goodland | | Reservoir Niobrara | | Gas Gathering Connection KN | | | | |
| Completion Date 10-12-83 | | Plug Back Total Depth 1211' | | | Packer Set at | | | |
| Casing Size 4.5 | Weight 9.5# | Internal Diameter | Set at 1246' KB | Perforations 1086' | To 1102' | | | |
| Tubing Size | Weight | Internal Diameter | Set at | Perforations | To | | | |
| Type Completion (Describe) Single Gas | | | Type Fluid Production | | Pump Unit or Traveling Plunger? Yes / No | | | |
| Producing Thru (Annulus / Tubing) Casing | | | % Carbon Dioxide | | % Nitrogen | | Gas Gravity - G _g 0.60 | |
| Vertical Depth(H) 1102' | | | Pressure Taps | | | Maximum (Prover) Size 2" | | |
| Pressure Buildup: Shut in 7/6 19 99 at 8:00 (AM) (PM) Taken 7/7 19 99 at 8:00 (AM) (PM) | | | | | | | | |
| Well on Line: Started _____ 19__ at _____ (AM) (PM) Taken _____ 19__ at _____ (AM) (PM) | | | | | | | | |

OBSERVED SURFACE DATA

Duration of Shut-in _____ Hours

| Static / Dynamic Property | Orifice Size inches | Circle one: Meter or Prover Pressure psig | Pressure Differential in (h) Inches H ₂ O | Flowing Temperature t | Well Head Temperature t | Casing Wellhead Pressure (P _w) or (P _i) or (P _c) | | Tubing Wellhead Pressure (P _w) or (P _i) or (P _c) | | Duration (Hours) | Liquid Produced (Barrels) |
|---------------------------|---------------------|---|--|-----------------------|-------------------------|--|------|--|------|------------------|---------------------------|
| | | | | | | psig | psia | psig | psia | | |
| Shut-In | | | | | | 23 | | | | | |
| Flow | | | | | | | | | | | |

FLOW STREAM ATTRIBUTES

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

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_o)² = 0.207

(P_c)² = _____ : (P_w)² = _____ : P_a = _____ % (P_c - 14.4) + 14.4 = _____ :

(P_o)² = _____

| (P _c) ² - (P _o) ² or (P _c) ² - (P _w) ² | (P _c) ² - (P _w) ² | Choose formula 1 or 2: 1. P _c ² - P _o ² 2. P _c ² - P _w ² divided by: P _c ² - P _w ² | LOG of formula 1. or 2. and divide by: $\frac{P_c^2 - P_w^2}{P_c^2 - P_o^2}$ | 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

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 23 day of December, 1999.

RECEIVED
ST. CORPORATION COMMISSION
DEC 28 1999

Witness (if any)

For Commission

John Sanders

For Company
Conservation Division
Wichita, Kansas
Checked by _____


I declare under penalty or 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 Lobo Production, Inc. and that the foregoing information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon gas production records and records of equipment installation and/or of type completion or upon use of the gas well herein named.

I hereby request a permanent exemption from open flow testing for the City of Goodland 1-8 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 incapable of producing at a daily rate in excess of 150 mcf/D

Date: 12/23/99

Signature: 
Title: Owner/Operator

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.