

**KANSAS CORPORATION COMMISSION  
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST**

FORM G-2  
(Rev. 8/98)

**TYPE TEST:**

- Open Flow  
 Deliverability

**TEST DATE:** 8/14/11

**API No.** 15-033-21134-00-00

|  |                         |                                      |                       |   |                            |                                |
|--|-------------------------|--------------------------------------|-----------------------|---|----------------------------|--------------------------------|
| <b>Company</b><br>Thoroughbred Associates        |                         | <b>Lease</b><br>Bird Ranch           |                       |   | <b>Well Number</b><br>1    |                                |
| <b>County</b><br>Comanche                        |                         | <b>Location</b><br>C-NE-NE-SE        |                       | <b>Section TWP RRG(B/W)</b><br>Sec. 5-T32S-R19W |                            | <b>Acres Attributed</b>        |
| <b>Field</b>                                     |                         | <b>Reservoir</b><br>Mississippi      |                       | <b>Gas Gathering Connection</b>                 |                            |                                |
| <b>Completion Date</b><br>1/22/00                |                         | <b>Plug Back Total Depth</b><br>5320 |                       | <b>Packer Set at</b><br>None                    |                            |                                |
| <b>Casing Size</b><br>5.500                      | <b>Weight</b><br>15.500 | <b>Internal Diameter</b><br>4.900    | <b>Set at</b><br>5364 | <b>Perforations</b><br>5214                     | <b>To</b><br>5245          |                                |
| <b>Tubing Size</b><br>2.375                      | <b>Weight</b><br>4.700  | <b>Internal Diameter</b><br>1.950    | <b>Set at</b><br>5200 | <b>Perforations</b>                             | <b>To</b>                  |                                |
| <b>Type Completion (Describe)</b><br>Tuubing     |                         | <b>Type Fluid Production</b>         |                       | <b>Pump Unit or Traveling Plunger?</b>          |                            |                                |
| <b>Producing Thru (Annulus/Tubing)</b><br>Tubing |                         | <b>% Carbon Dioxide</b><br>.091      |                       | <b>% Nitrogen</b><br>1.254                      |                            | <b>Gas Gravity- Gg</b><br>.604 |
| <b>Vertical Depth (ft)</b><br>5214               |                         | <b>Pressure Taps</b><br>Flange       |                       |   | <b>Meter Run Size</b><br>3 |                                |
| <b>Pressure Buildup: Shut in</b> 8/11/11         |                         |                                      |                       | <b>TAKEN</b> 3:55 PM                            |                            |                                |
| <b>Well on Line: Started</b> 8/14/11             |                         |                                      |                       | <b>TAKEN</b> 1:45 PM                            |                            |                                |

**OBSERVED SURFACE DATA**

| Static/<br>Dynamic<br>Property | Orifice<br>Size<br>in. | Meter<br>Pressure<br>psig | Pressure<br>Diff.<br>In. H <sub>2</sub> O | Flowing<br>Temp.<br>t. | WellHead<br>Temp.<br>t. | Casing WellHead Press.<br>(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) |      | Tubing WellHead Press.<br>(P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> ) |      | Duration<br>(Hours) | Liquid<br>Prod.<br>Barrels |
|--------------------------------|------------------------|---------------------------|---|------------------------|-------------------------|---|------|---|------|---------------------|----------------------------|
|                                |                        |                           |   |                        |                         | psig  | psia | psig  | psia |                     |                            |
| Shut-in                        |                        |                           |   |                        |                         | 570   | 584  |   |      | 70.0                |                            |
| Flow                           | .550                   | 30.0                      | 1.00                                      | 60                     | 60                      | 50  | 64   | 140   | 154  | 24.0                |                            |

**FLOW STREAM ATTRIBUTES**

| COEFFICIENT<br>(F <sub>b</sub> )<br>Mcfd | (METER)<br>PRESSURE<br>psia | EXTENSION<br>$\sqrt{P_m \times R_w}$ | GRAVITY<br>FACTOR<br>F <sub>g</sub> | FLOWING TEMP<br>FACTOR<br>F <sub>t</sub> | DEVIATION<br>FACTOR<br>F <sub>pv</sub> | RATE OF FLOW<br>R<br>Mcfd | GOR | G <sub>m</sub> |
|--|-----------------------------|--------------------------------------|-------------------------------------|--|--|---------------------------|-----|----------------|
| 1.214                                    | 44.4                        | 6.66                                 | 1.2867                              | 1.0000                                   | 1.0033                                 | 10                        |     | .604           |

**(OPEN FLOW)(DELIVERABILITY) CALCULATIONS**

$(P_c)^2 = 341.5$        $(P_w)^2 = 4.1$        $R_d = 8.6$        $\% (P_c - 14.4) + 14.4 =$        $(P_a)^2 = 0.207$   
 $(P_d)^2 = 2.50$

| $(P_c)^2 - (P_a)^2$<br>or<br>$(P_c)^2 - (P_d)^2$ | $(P_c)^2 - (P_w)^2$ | $\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$<br>or<br>$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$ | LOG   | Backpressure<br>Curve Slope "n"<br>----- or -----<br>Assigned<br>Standard Slope | n x LOG | Antilog | Open Flow<br>Deliverability<br>= R x Antilog<br>Mcfd |
|--|---------------------|--|-------|---|---------|---------|--|
| 341.32   | 337.38              | 1.012  | .0050 | .806  | .0041   | 1.009   | 10   |
| 339.02   | 337.38              | 1.005  | .0021 | .806  | .0017   | 1.004   | 10   |

**OPEN FLOW** 10 Mcfd @ 14.65 psia      **DELIVERABILITY** 10 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 herein and that said report is true and correct. Executed this the 5<sup>th</sup> day of April, 2012

Witness (if any)

For Commission

RECEIVED

APR 05 2012

Checked by

KCC WICHITA