# KANSAS CORPORATION COMMISSION
## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST
### (See Instructions on Reverse Side)

Type Test:

☑ Open Flow

☐ Deliverabilty

| Test Date: 4/21 to 4/22/14 | API No. 15 151-20671-00-00 | |
|---|---|---|

| Company Griffin Management | Lease Curtis | Well Number 1 |
|---|---|---|

| County Pratt | Location S/2 S/2 | Section 2 | TWP 27S | RNG (E/W) 15W | Acres Attributed |
|---|---|---|---|---|---|

| Field | Reservoir Miss | Gas Gathering Connection Oneok |
|---|---|---|

| Completion Date 3/25/80 | Plug Back Total Depth 4594 | Packer Set at none |
|---|---|---|

| Casing Size 5.5 | Weight | Internal Diameter | Set at 4608 | Perforations 4421 | To 4423 |
|---|---|---|---|---|---|

| Tubing Size 2.375 | Weight | Internal Diameter | Set at 4600 | Perforations | To |
|---|---|---|---|---|---|

| Type Completion (Describe) single | Type Fluid Production Oil/SW | Pump Unit or Traveling Plunger? Yes / No Yes - Traveling plunger |
|---|---|---|

| Producing Thru (Annulus / Tubing) tubing | % Carbon Dioxide .2166 | % Nitrogen 4.6067 | Gas Gravity - $G_g$ .659 |
|---|---|---|---|

| Vertical Depth(H) | Pressure Taps flange | (Meter Run) (Prover) Size 2" |
|---|---|---|

Pressure Buildup: Shut in 4/18 20 14 at 8:45 am (AM) (PM) Taken 4/21 20 14 at 8:45 am (AM) (PM)

Well on Line: Started 4/21 20 14 at 8:45 am (AM) (PM) Taken 4/22 20 14 at 8:45 am (AM) (PM)

### OBSERVED SURFACE DATA
Duration of Shut-in 72 Hours

| Static / Dynamic Property | Orifice Size (inches) | Circle one: Meter Prover Pressure psig (Pm) | Pressure Differential in Inches H₂0 | Flowing Temperature t | Well Head Temperature t | Casing Wellhead Pressure ($P_w$) or ($P_t$) or ($P_c$) psig | psia | Tubing Wellhead Pressure ($P_w$) or ($P_t$) or ($P_c$) psig | psia | Duration (Hours) | Liquid Produced (Barrels) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Shut-In | | | | | | 333.0 | 347.4 | | | 72 | |
| Flow | .625 | 50.0 | 114.0 | 75 | | 266.4 | 280.8 | | | 24 | 0 |

### FLOW STREAM ATTRIBUTES

| Plate Coeffiecient ($F_b$) ($F_p$) Mcfd | Circle one: Meter or Prover Pressure psia | Press Extension $\sqrt{P_m \times h}$ | Gravity Factor $F_g$ | Flowing Temperature Factor $F_{tt}$ | Deviation Factor $F_{pv}$ | Metered Flow R (Mcfd) | GOR (Cubic Feet/ Barrel) | Flowing Fluid Gravity $G_m$ |
|---|---|---|---|---|---|---|---|---|
| 1.914 | 64.6 | 85.68 | 1.232 | .9859 | ——— | 199 | | |

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

$(P_c)^2 =$ 120.686 : $(P_w)^2 =$ 78.848 : $P_d =$ _____ % $(P_c - 14.4) + 14.4 =$ _____ :

$(P_a)^2 =$ 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: $P_c^2 - P_w^2$ | Backpressure Curve Slope = "n" ----or---- Assigned Standard Slope | n x LOG | Antilog | Open Flow Deliverability Equals R x Antilog (Mcfd) |
|---|---|---|---|---|---|---|---|
| 120.479 | 41.838 | 2.879 | .4592 | .850 | .3903 | 2.45 | 487.5 |
| | | | | | | | |

| Open Flow 487.5 | 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 29th day of April , 20 14 .

| Witness (if any) | _signature_ For Company |
|---|---|
| For Commission | Checked by |