

**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.** 15-033-21,051.00-00

<b>Company</b> Thoroughbred Associates		<b>Lease</b> KACI		<b>Well Number</b> 1	
<b>County</b> COMANCHE	<b>Location</b>	<b>Section</b> 20	<b>TWP</b> 32	<b>RNG (E/W)</b> 19W	<b>Acres Attributed</b> 160
<b>Field</b>		<b>Reservoir</b> MISSISSIPPI		<b>Gas Gathering Connection</b>	
<b>Completion Date</b>		<b>Plug Back Total Depth</b> 5330		<b>Packer Set at</b>	
<b>Casing Size</b> 5.500	<b>Weight</b> 15.500	<b>Internal Diameter</b> 4.950	<b>Set at</b> 5330	<b>Perforations</b> 5230	<b>To</b> 5236
<b>Tubing Size</b> 2.375	<b>Weight</b> 4.700	<b>Internal Diameter</b> 1.950	<b>Set at</b> 5100	<b>Perforations</b>	<b>To</b>
<b>Type Completion (Describe)</b>		<b>Type Fluid Production</b>		<b>Pump Unit or Traveling Plunger?</b>	
<b>Producing Thru (Annulus/Tubing)</b> TUBING		<b>% Carbon Dioxide</b> .253		<b>% Nitrogen</b> 1.220	
<b>Gas Gravity- Gg</b> .624		<b>Vertical Depth (ft)</b> 5230		<b>Pressure Taps</b> FLANGE	
<b>Meter Run Size</b> 3		<b>Pressure Buildup: Shut in</b> 8/11/11		<b>TAKEN</b> 9:04 AM	
<b>Well on Line: Started</b> 8/14/11		<b>TAKEN</b>		<b>10:40 AM</b>	

**OBSERVED SURFACE DATA**

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H <sub>2</sub> O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Tubing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						205	219			73.5	
Flow	.500	45.0	1.00	60	60	50	64			24.0	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>b</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times R_w}$	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP FACTOR F <sub>t</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
1.214	59.4	7.71	1.2659	1.0000	1.0050	11		.624

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

(P<sub>o</sub>)<sup>2</sup> = 48.1      (P<sub>w</sub>)<sup>2</sup> = 4.1      P<sub>d</sub> = 22.8      % (P<sub>c</sub> - 14.4) + 14.4 =      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = 2.50

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$ or $\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$	LOG	Backpressure Curve Slope "n" ---- or ---- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcf/d
47.93	43.99	1.090	.0373	.850	.0317	1.076	12
45.64	43.99	1.037	.0160	.850	.0136	1.032	12

**OPEN FLOW** 12 Mcfd @ 14.65 psia      **DELIVERABILITY** 12 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, 20 12

Witness (if any)

For Commission

RECEIVED

APR 05 2012

Checked by

KCC WICHITA