

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

FORM G-2  
(Rev. 8/98)

**TYPE TEST:**

- Open Flow  
 Deliverability

TEST DATE: 9/14/12 API No. 15-033-20949-∞-∞∞

Company Thoroughbred Associates		Lease Bird		Well Number 1	
County Comanche		Location C-SE-SW		Acres Attributed 160	
Field		Reservoir Mississippi		Gas Gathering Connection Thoroughbred	
Completion Date 1/21/98		Plug Back Total Depth 5320		Packer Set at None	
Casing Size 5.500	Weight 15.500	Internal Diameter 4.950	Set at 5403	Perforations 5056	To 5119
Tubing Size 2.000	Weight 4.700	Internal Diameter 1.995	Set at 5128	Perforations	To
Type Completion (Describe) Single (Gas)		Type Fluid Production Salt Water		Pump Unit or Traveling Plunger? Pumping	
Producing thru (Annulus/Tubing) Casing		% Carbon Dioxide .180		% Nitrogen 1.090	
Gas Gravity- Gg .609		Vertical Depth (H) 5056		Pressure Taps Flange	
Meter Run Size 3		Pressure Buildup: Shut in 9/11/12		TAKEN 3:45	
Well on Line: Started 9/14/12				TAKEN 3:50	

**RECEIVED  
OCT 31 2012  
KCC WICHITA**

**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						55	69			72.0	
Flow	1.250	30.0	1.00	60	60	85	99			24.0	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>b</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
7.771	44.4	6.66	1.2814	1.0000	1.0036	66		.609

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

(P<sub>c</sub>)<sup>2</sup> = 4,816      (P<sub>w</sub>)<sup>2</sup> = 9,880      Pd = \_\_\_\_\_      % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

$(P_c)^2 - (P_a)^2$ 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

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 herein and that said report is true and correct. Executed this the 27 day of October, 20 12

Witness (if any)

For Commission

For Company

Checked by