

KANSAS CORPORATION COMMISSION  
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2  
(Rev. 8/98)

TYPE TEST:

- Open Flow  
 Deliverability

TEST DATE: 12/13/10 API No. 15-033-20949 - 0000

Company <i>Thoroughbred Associates</i>		Lease Bird		Well Number 1	
County Comanche	Location C-SE-SW	Section Sec. 16-T32S-R19W	TWP RNG (E/W)	Acres Attributed 160	
Field Mississippi		Gas Gathering Connection One Oak			
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) Casing	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 (ft) 5056	Pressure Taps Flange		Meter Run Size 3		
Pressure Buildup: Shut in	12/10/10	TAKEN		3:45	
Well on Line: Started	12/13/10	TAKEN		3:50	

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						240	254			72.0	
Flow	1.250	30.0	24.00	60	60	85	99			24.0	

FLOW STREAM ATTRIBUTES

COEFFICIENT (F <sub>b</sub> ) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcfd	GOR	G <sub>m</sub>
7.771	44.4	32.64	1.2814	1.0000	1.0036	326		.609

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 64.7      (P<sub>w</sub>)<sup>2</sup> = 9.9      P<sub>d</sub> = 19.7      %      (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 $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$ or $\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	LOG [ ]	Backpressure Curve Slope "n" --- or --- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability = R x Antilog Mcfd
64.51	54.77	1.178	.0711	.609	.0433	1.105	360
62.22	54.77	1.136	.0554	.609	.0337	1.081	352

OPEN FLOW 360 Mcfd @ 14.65 psia      DELIVERABILITY 352 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 3rd day of January, 2011

Witness (if any) \_\_\_\_\_  
For Commission \_\_\_\_\_

RECEIVED  
JAN 03 2011

\_\_\_\_\_  
For Company  
Checked by \_\_\_\_\_

KCC WICHITA