

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. 15-033-21,328 - 00 - 00

Company Thoroughbred Associates		Lease TIM			Well Number 1	
County COMANCHE	Location C SE SW	Section SEC. 4-T32S-19W	TWP RNG(E/W)	Acres Attributed 160		
Field NW COLDWATER	Reservoir MISSISSIPPI		Gas Gathering Connection			
Completion Date 10/25/02	Plug Back Total Depth 5200		Packer Set at			
Casing Size 4.500	Weight 10.500	Internal Diameter 3.950	Set at 5490	Perforations 5200	To 5205	
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.995	Set at 5200	Perforations	To	
Type Completion (Describe) TUBINGSINGLE	Type Fluid Production		Pump Unit or Traveling Plunger?			
Producing Thru (Annulus/Tubing) TUBING	% Carbon Dioxide .045		% Nitrogen 1.235		Gas Gravity- Gg .605	
Vertical Depth (ft) 5200	Pressure Taps Flange		Meter Run Size 3			
Pressure Buildup: Shut in	8/11/11	TAKEN		9:15 AM		
Well on Line: Started	8/14/11	TAKEN		9:30AM		

OBSERVED SURFACE DATA

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H ₂ O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P _w) (P _t) (P _c)		Tubing WellHead Press. (P _w) (P _t) (P _c)		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						175	189			72.5	
Flow	1.250	45.0	1.00	60	60	50	64			24.0	

FLOW STREAM ATTRIBUTES

COEFFICIENT (F _b) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcf/d	GOR	G _m
7.770	59.4	7.71	1.2856	1.0000	1.0047	77		.605

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P_c)² = 35.9

(P_w)² = 4.1

P_d = 26.4

‡ (P_c - 14.4) + 14.4 =

(P_a)² = 0.207

(P_d)² = 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
35.67	31.73	1.124	.0508	.699	.0355	1.085	83
33.37	31.73	1.052	.0220	.699	.0154	1.036	80

OPEN FLOW 83 Mcfd @ 14.65 psia DELIVERABILITY 80 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 5th day of April, 2005

Witness (if any)

For Commission

RECEIVED

APR 05-2012

Checked by

KCC WICHITA