

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. 15-033-21,328 - 0000

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	12/10/10	TAKEN		9:15 AM	
Well on Line: Started	12/13/10	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						185	199			72.5	
Flow	1.250	45.0	1.50	60	60	50	64			24.0	

FLOW STREAM ATTRIBUTES

COEFFICIENT (F _b) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times R_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcf/d	GOR	G _m
7.770	59.4	9.44	1.2856	1.0000	1.0047	94		.605

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P_c)² = 39.8

(P_w)² = 4.1

P_d = 25.1

‡ (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
39.55	35.61	1.111	.0456	.699	.0319	1.076	101
37.26	35.61	1.046	.0196	.699	.0137	1.032	97

OPEN FLOW 101 Mcfd @ 14.65 psia DELIVERABILITY 97 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

RECEIVED

JAN 03 2011

KCC WICHITA

Witness (if any)

For Commission

For Company

Checked by