

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. 15-033-21,051 - 0000

Company Thoroughbred Associates		Lease KACI			Well Number 1	
County COMANCHE	Location	Section 20	TWP 32	RNG(E/W) 19W	Acres Attributed 160	
Field	Reservoir MISSISSIPPI		Gas Gathering Connection			
Completion Date	Plug Back Total Depth 5330		Packer Set at			
Casing Size 5.500	Weight 15.500	Internal Diameter 4.950	Set at 5330	Perforations 5230	To 5236	
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.950	Set at 5100	Perforations	To	
Type Completion (Describe)	Type Fluid Production		Pump Unit or Traveling Plunger?			
Producing Thru (Annulus/Tubing) TUBING	% Carbon Dioxide .253		% Nitrogen 1.220		Gas Gravity- Gg .624	
Vertical Depth (H) 5230	Pressure Taps FLANGE			Meter Run Size 3		
Pressure Buildup: Shut in	12/10/10	TAKEN		9:04 AM		
Well on Line: Started	12/13/10	TAKEN		10:40 AM		

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						168	182			73.5	
Flow	.500	45.0	42.00	60	60	50	64			24.0	

FLOW STREAM ATTRIBUTES

COEFFICIENT (F _b) Mcfd	(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 Mcfd	GOR	G _m
1.214	59.4	49.95	1.2659	1.0000	1.0050	77		.624

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P_c)² = 33.3 (P_w)² = 4.1 P_d = 27.4 % (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 Mcfd
33.06	29.12	1.135	.0551	.850	.0468	1.114	85
30.77	29.12	1.057	.0239	.850	.0203	1.048	80

OPEN FLOW **85** 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 3rd day of January, 20 11

Witness (if any) _____

For Commission _____

RECEIVED

JAN 03 2011

KCC WICHITA

For Company

Checked by _____