KANSAS CORPORATION COMMISSION
ONE POINT STABLIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2
(Rev.8/98)

TYPE TEST:
☒ Open Flow
☒ Deliverability

TEST DATE: 9/14/12 API No. 15-033-21,215-00-00

Company	Lease	Well Number
Thoroughbred Associates	HERRINGTON-TWIN	1

County	Location	Section	TWP	RNG(E/W)	Acres Attributed
COMANCHE	S/2 NE/4 SE/4	SEC. 15-	R32S-	T19W	160

Field	Reservoir	Gas Gathering Connection
COLDWATER SW	MISSISSIPPI	Thoroughbred & Associates

RECEIVED
OCT 31 2012
KCC WICHITA

Completion Date	Plug Back Total Depth	Packer Set at
8/6/01	5199	NONE

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4.500	10.500	3.927	5342	5159	5168

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
2.375	4.700	1.950	5169		

Type Completion (Describe)	Type Fluid Production	Pump Unit or Traveling Plunger?
Single (Gas)		No - Flowing

Producing Thru (Annulus/Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity- Gg
TUBING	.090	1.067	.600

Vertical Depth (H)	Pressure Taps	Meter Run Size
5159	FLANGE	3

Pressure Buildup: Shut in	9/11/12	TAKEN	9:00 AM
Well on Line: Started	9/14/12	TAKEN	7:20 AM

OBSERVED SURFACE DATA

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H_2O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P_w) (P_t) (P_c) psig	Casing WellHead Press. psia	Tubing WellHead Press. (P_w) (P_t) (P_c) psig	Tubing WellHead Press. psia	Duration (Hours)	Liquid Prod. Barrels
Shut-in						200	214			70.5	
Flow	1.000	45.0	1.00	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 Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcfd	GOR	G_m
4.912	59.4	7.71	1.2910	1.0000	1.0047	49		.600

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

$(Pc)^2$ = 46.0 $(Pw)^2$ = 4.1 Pd = 23.3 % (Pc - 14.4) + 14.4 = $(Pa)^2$ = 0.207 $(Pd)^2$ = 2.50

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2 \text{ or } (P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	LOG [ ]	Backpressure Curve Slope "n" ---- or ---- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability = R x Antilog Mcfd
45.76	41.82	1.094	.0391	.542	.0212	1.050	51
43.47	41.82	1.039	.0168	.542	.0091	1.021	50

OPEN FLOW 51 Mcfd @ 14.65 psia DELIVERABILITY 50 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 29th day of October, 20 12

Witness (if any)

For Company

For Commission

Checked by