

**KANSAS CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST**

FORM G-2
(Rev. 8/98)

TYPE TEST:

- Open Flow
 Deliverability

TEST DATE: 11/16/2017 API No. 007-23829-00-00

Company Chieftain Oil Co Inc		Lease Millie A			Well Number 1	
County Barber	Location NW SE SE NW	Section 15	TWP 35s	RNG (E/W) 11w	Acres Attributed 174.5	
Field Klowa Townsite	Reservoir Mississippi	Gas Gathering Connection Targa				
Completion Date 2/10/2012	Plug Back Total Depth 5573	Packer Set at none				
Casing Size 5.500	Weight 15.500	Internal Diameter 4.052	Set at 5563	Perforations	To	
Tubing Size 2.875	Weight 6.500	Internal Diameter 2.441	Set at 4880	Perforations	To	
Type Completion (Describe) Single	Type Fluid Production Oil/Water	Pump Unit or Traveling Plunger? submersible pump				
Producing Thru (Annulus/Tubing) annulus	% Carbon Dioxide 0.159	% Nitrogen 1.249	Gas Gravity- Gg 0.646			
Vertical Depth (H) 4812	Pressure Taps flange	Meter Run Size 2"				
Pressure Buildup: Shut in	11/13/2017@0900	TAKEN	11/16/2017@1330			
Well on Line: Started	11/16/2017@1330	TAKEN	11/17/2017@1400			

**KCC WICHITA
DEC 04 2017
RECEIVED**

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						596	610			76.5	
Flow	1.250	31.1	47.00	68	60	400	414			24.5	559.0

FLOW STREAM ATTRIBUTES

Coefficient (F _D) 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
8.329	45.5	46.24	1.2442	0.9924	1.0039	477	871	2.759

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P_c)² = 372.6 (P_w)² = 173.2 P_d = 5.1 % (P_c - 14.4) + 14.4 = (P_a)² = 0.207
(P_d)² = 0.97

$(P_c)^2 - (P_a)^2$ or $(F_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$ or $\frac{(P_c)^2 - (P_d)^2}{(P_c)^2 - (P_w)^2}$	LOG	Backpressure Curve Slope "n" ----- or ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcf/d
372.38	199.37	1.868	0.2713	0.850	0.2306	1.701	811
371.62	199.37	1.864	0.2704	0.850	0.2299	1.698	810

OPEN FLOW 811 Mcfd @ 14.65 psia DELIVERABILITY 810 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 30 day of November 2017

[Signature]

Witness (if any)

For Commission

For Company

Checked by