

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

FORM G-2  
(Rev. 8/98)

TYPE TEST:

- Open Flow  
 Deliverability

TEST DATE: 4/7/2018

API No. 15-007-23380 - 0000

Company Chieftain Oil Co Inc		Lease Scotty			Well Number A #1	
County Barber	Location SE NW NW NW	Section 4	TWP 34s	RNG (E/W) 10w	Acres Attributed 160	
Field Kochia	Reservoir Mississippian	Gas Gathering Connection Targa Pipeline				
Completion Date 11/25/2008	Plug Back Total Depth 5180			Packer Set at none		
Casing Size 5.500	Weight 15.500	Internal Diameter 4.052	Set at 5210	Perforations 4636	To 4652	
Tubing Size 2.875	Weight 6.500	Internal Diameter 2.441	Set at 4700	Perforations	To	
Type Completion (Describe) Single	Type Fluid Production Oil/Water			Pump Unit or Traveling Plunger? pumping unit		
Producing Thru (Annulus/Tubing) annulus	% Carbon Dioxide 0.092			% Nitrogen 3.496	Gas Gravity- Gg 0.654	
Vertical Depth (H) 4644	Pressure Taps flange			Meter Run Size 2.067		
Pressure Buildup: Shut in	4/3/2018@0900			TAKEN	4/6/2018@0945	
Well on Line: Started	4/6/2018@0945			TAKEN	4/7/2018@1115	

**OBSERVED SURFACE DATA**

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H <sub>2</sub> O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Tubing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						516	530			72.7	
Flow	0.500	36.2	223.00	39	60	178	192			26.5	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>b</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
1.219	50.6	106.23	1.2365	1.0208	1.0051	164		0.654

**(OPEN FLOW)(DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = 281.3      (P<sub>w</sub>)<sup>2</sup> = 37.3      P<sub>d</sub> = 6.8      %      (P<sub>c</sub> - 14.4) + 14.4 =      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = 1.31

$(P_c)^2 - (P_a)^2$ 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" Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcf/d
281.12	244.04	1.152	0.0614	0.850	0.0522	1.128	185
280.01	244.04	1.147	0.0597	0.850	0.0508	1.124	184

OPEN FLOW      185      Mcfd @ 14.65 psia      DELIVERABILITY      184      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 20 day of April, 2018.

*[Signature]*  
For Company

\_\_\_\_\_  
Witness (if any)  
\_\_\_\_\_  
For Commission

**KCC WICHITA**

**APR 26 2018**

**RECEIVED**

\_\_\_\_\_  
Checked by

I declare under penalty or perjury under the laws of the state of Kansas that I am authorized to request exempt status under rule K.A.R. 82-3-304 on behalf of the operator Chieftain Oil Co Inc and that the foregoing information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon gas production records and records of equipment installation and/or of type completion or upon use of the gas well herein named.

I hereby request a permanent exemption from open flow testing for the Scotty gas well on the grounds that said well:

(check one)

- is a coalbed methane producer
- is cycled on plunger lift due to water
- is a source of natural gas for injection into an oil reservoir undergoing ER
- is on vacuum at the present time; KCC approval Docket No. \_\_\_\_\_
- is incapable of producing at a daily rate in excess of 250 mcf/D

Date: 4-26-2018

Signature: Robert Raleigh  
Title: Field Supervisor

**Instructions:**

All active gas wells must have at least an original G-2 form on file with the conservation division. If a gas well meets the eligibility criteria set out in KCC regulation K.A.R. 82-3-304, the operator may complete the statement provided above in order to obtain a testing exemption.

At some point during the succeeding calendar year, wellhead shut-in pressure shall be measured after a minimum of 24 hours shut-in/buildup time and shall be reported on the front side of this form under "observed surface data." Shut-in pressure shall thereafter be reported yearly in the same manner.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than thirty (30) days after the taking of the pressure reading. The form must be signed and dated on the front side as though it was a verified report of test results.