

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow
 Deliverability

Test Date: **6-7-13**

API No. 15 - 007-22539-0000

Company Coats Energy, Inc		Lease Clarke			Well Number 1
County Barber	Location SENNW	Section 7	TWP 31S	RNG (EW) 12W	Acres Attributed
Field Nurse		Reservoir Lower Douglas	Gas Gathering Connection Oneok		
Completion Date 7/9/97		Plug Back Total Depth 3750	Packer Set at none		
Casing Size 4 1/2	Weight 10.5	Internal Diameter	Set at 3797	Perforations 3695 To 3699	To
Tubing Size 2 3/8	Weight 4.7	Internal Diameter	Set at 3695	Perforations	To
Type Completion (Describe) Single Pumping		Type Fluid Production salt water	-Pump Unit or Traveling Plunger? (Yes) No Pumping Unit		
Producing Thru (Annulus / Tubing) annulus		% Carbon Dioxide .177	% Nitrogen 5.527	Gas Gravity - G _g .6662	
Vertical Depth(H) 3697		Pressure Taps Fingered		(Meter Run) (Prover) Size 2.068	
Pressure Buildup: Shut in 6-6 2013 at 9am (AM) (PM) Taken 6-7 2013 at 9am (AM) (PM)					
Well on Line: Started _____ 19 ____ at _____ (AM) (PM) Taken _____ 19 ____ at _____ (AM) (PM)					

OBSERVED SURFACE DATA

Duration of Shut-in **24** Hours

Static / Dynamic Property	Orifice Size inches	Circle one: Meter or Prover Pressure psig	Pressure Differential in (h) Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _r) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _r) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In	0.375					155	169.4				
Flow											

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _v) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times H_w}$	Gravity Factor F _g	Flowing Temperature Factor F _t	Deviation Factor F _{pv}	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = _____ : (P_w)² = _____ : P_d = _____ % (P_c - 14.4) + 14.4 = _____ : (P_d)² = 0.207 (P_o)² = _____

(P _c) ² - (P _w) ² or (P _d) ² - (P _w) ²	(P _d) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _w ² 2. P _d ² - P _w ² divided by: P _c ² - P _w ²	LOG of formula 1. or 2. and divide by: $\left[\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2} \right]$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG $\left[\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2} \right]$	Antilog	Open Flow Deliverability Equals R x Antilog Mcfd

Open Flow **Mcfd @ 14.65 psia** Deliverability **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 therein, and that said report is true and correct. Executed this the **7th** day of **June**, **2013**.

KCC WICHITA *Charles Casey Coats*

Witness (if any)

For Company

For Commission

JUN 10 2013

Checked by

RECEIVED

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 Coats Energy, 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 Clarke #1 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 150 mcf/D

Date: 6-7-13

Signature: Charles Casey Coats

Title: President

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.