

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow
 Deliverability

(See Instructions on Reverse Side)

Test Date:
May 16, 2015

API No. 15
15033214520000

Company Castelli Exploration, Inc.			Lease Merrill Ranch		Well Number #1-34
County Comanche	Location NW NE	Section 34	TWP 33S	RNG (E/W) 16W	Acres Attributed
Field Ham		Reservoir Mississippi	Gas Gathering Connection Oneok		
Completion Date 12/07/05		Plug Back Total Depth 4938	Packer Set at		
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 8rd	Set at 4949	Perforations 4877	To 4883
Tubing Size 2 3/8"	Weight	Internal Diameter	Set at 4888	Perforations	To
Type Completion (Describe) Perf Single Zone Gas Well		Type Fluid Production Saltwater	Pump Unit or Traveling Plunger? Pumping Unit		Yes / No
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide	% Nitrogen		Gas Gravity - G _g
Vertical Depth(H)		Pressure Taps		(Meter Run) (Prover) Size	

KCC WICHITA
FEB 01 2016
RECEIVED

Pressure Buildup: Shut in May 16 20 15 at 8:00 (AM) (PM) Taken May 17 20 15 at 8:00 (AM) (PM)

Well on Line: Started _____ 20 ____ at _____ (AM) (PM) Taken _____ 20 ____ at _____ (AM) (PM)

OBSERVED SURFACE DATA

Duration of Shut-in _____ Hours

Static / Dynamic Property	Orifice Size (Inches)	Circle one: Motor or Prover Pressure psig (P _m)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Tubing Wellhead Pressure (P _w) or (P ₁) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in						900	914.4				
Flow											

FLOW STREAM ATTRIBUTES

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

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_a)² = 0.207

(P_d)² = _____

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

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²	LOG of formula 1. or 2. and divide by: $\left[\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2} \right]$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG $\left[\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2} \right]$	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 21st day of January, 20 16.

Witness (if any)


For Company

For Commission

Checked by

I declare under penalty of 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 Castelli Exploration, Inc and that the foregoing pressure information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon available production summaries and lease records of equipment installation and/or upon type of completion or upon use being made of the gas well herein named.

I hereby request a one-year exemption from open flow testing for the Merrill Ranch #1-34 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 not capable of producing at a daily rate in excess of 250 mcf/D

KCC WICHITA
FEB 01 2016
RECEIVED

I further agree to supply to the best of my ability any and all supporting documents deemed by Commission staff as necessary to corroborate this claim for exemption from testing.

Date: January 21, 2016

Signature: Thomas D. Cate

Title: President

Instructions: If a gas well meets one of 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 claim exempt status for the gas well.

At some point during the current calendar year, wellhead shut-in pressure shall have been 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 for so long as the gas well continues to meet the eligibility criterion or until the claim of eligibility for exemption **IS** denied.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than December 31 of the year for which it's intended to acquire exempt status for the subject well. The form must be signed and dated on the front side as though it was a verified report of annual test results.