

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

Open Flow

Deliverability

Test Date:
02/28/2015

API No. 15
15-145-21,655-00-00

Company Shelby Resources, LLC		Lease Eakin		Well Number 5-7	
County Pawnee	Location 883' FSL & 921' FEL	Section 7	TWP 22s	RNG (E/W) 16w	Acres Attributed 160
Field Larned West		Reservoir Basil-Penn.		Gas Gathering Connection SemGas, LP	
Completion Date 01/10/2012		Plug Back Total Depth 3941'		Packer Set at None	
Casing Size 5.5"	Weight 15.5#	Internal Diameter 4.950	Set at 3971'	Perforations 3887'	To 3891'
Tubing Size 2.375"	Weight 4.7#	Internal Diameter 1.995	Set at 3891'	Perforations SN	To
Type Completion (Describe) Natural		Type Fluid Production None		Pump Unit or Traveling Plunger? Yes / No None	
Producing Thru (Annulus / Tubing) Tubing		% Carbon Dioxide 0.25%		% Nitrogen 28.47%	
Vertical Depth(H)		Pressure Taps Flange Tap		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in		February 24, 2015 at 10:00am		(AM) (PM) Taken February 27, 2015 at 10:00am (AM) (PM)	
Well on Line: Started		February 27, 2015 at 10:00am		(AM) (PM) Taken February 28, 2015 at 10:00am (AM) (PM)	

OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (Pm)	Pressure Differential in Inches H ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						276	290.4	142	156.4	72	
Flow	.625	70.6	19	32	30	165	179.4	95	109.4	24	0

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _v) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	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
1.914	85	40.19	1.163	1.028	1.00	92		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = 84.33 : (P_w)² = 32.18 : P_d = _____ % (P_c - 14.4) + 14.4 = _____ : (P_i)² = 0.207
(P_d)² = _____

(P _c) ² - (P _d) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _d 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: $\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
84.13	52.15	1.61	0.208	0.850	0.177	1.502	138

Open Flow 138

Mcfd @ 14.65 psia

Deliverability 35

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 28th day of February, 20 15.

Witness (if any)

Received
KANSAS CORPORATION COMMISSION

For Company

For Commission

APR 23 2015

Checked by

CONSERVATION DIVISION
WICHITA, KS

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 Shelby Resources, LLC 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 Eakin #5-7 gas well on the grounds that said well:

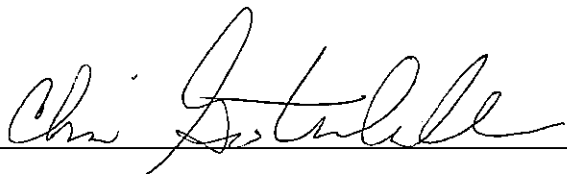
(Check one)

- 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

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: 02/28/2015

Received
KANSAS CORPORATION COMMISSION
APR 23 2015
CONSERVATION DIVISION
WICHITA, KS

Signature: 
Title: Production Manager

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.