

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow
 Deliverability

(See Instructions on Reverse Side)

Test Date:
2-19-2015

API No. 15
15-185-23866 - 0000

Company Mid-Continent Energy, Corp		Lease Fisher-Harter		Well Number 1	
County Stafford	Location NW-NE-NW-NW	Section 31	TWP 24S	RNG (E/W) 13W	Acres Attributed 160
Field Seevers Northwest		Reservoir Mississippi		Gas Gathering Connection Oneok	
Completion Date 5-28-2014		Plug Back Total Depth 4321'		Packer Set at None	
Casing Size 5.5"	Weight 15.5#	Internal Diameter 4.950"	Set at 4343'	Perforations 3983'	To 4000'
Tubing Size 2.375"	Weight 4.7#	Internal Diameter 1.995"	Set at 4056'	Perforations 3983'	To 4000'
Type Completion (Describe) Perforations		Type Fluid Production Water		Pump Unit or Traveling Plunger? Yes / No Yes, pumping unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide .136		% Nitrogen 15.95	
Vertical Depth(H) 4343'		Pressure Taps Flange		(Meter Run) (Prover) Size 2" Meter Run	
Pressure Buildup: Shut in 2-19 20 15 at 9:20 AM (AM) (PM)		Taken 2-20 20 15 at 9:32 AM (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: Meter or 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						270#	284.40#	0#	14.40#	24	0
Flow											

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _s) (F _a) 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

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_a)² = 0.207

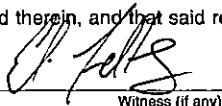
(P_d)² = _____

(P_c)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: $\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG $\left[\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2} \right]$	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 3rd day of March, 20 15.


Witness (if any)

Received
KANSAS CORPORATION COMMISSION


For Company

MAR 03 2015

For Commission

CONSERVATION DIVISION
WICHITA, KS

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 Mid-Continent Energy, Corp 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 Fisher-Harter #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 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: 3-3-2015

Received
KANSAS CORPORATION COMMISSION
MAR 03 2015
CONSERVATION DIVISION
WICHITA, KS

Signature: 

Title: Agent for Mid-Continent Energy, Corp.

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.

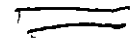
At some point during the current calendar year, wellhead shut-in pressure shall have been measured after a minimum of 24 hours shut-in/buildup time and shall be reported on the front side of this form under **OBSERVED SURFACE DATA**. Shut-in pressure shall thereafter be reported yearly in the same manner 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.

Meter Analysis

ONEOK Partners

January, 2015



KGS_DAILY_TF_PRATT

Meter: **460224** Name: **FISHER HARTNER #1**

	Mol %	Liquid Content		
Carbon Dioxide	0.136	0.0229	Pressure Base	14.650
Nitrogen	15.950	1.7448	Temperature Base	60.00
Methane	73.895	12.4562		
Ethane	4.364	1.1605		
Propane	2.405	0.6588	Relative Density	0.6897
Iso-Butane	0.371	0.1207	Dry Heating Value	945.85
N-Butane	0.811	0.2542	As. Del Heating Value	
Iso-Pentane	0.134	0.0487	Sat Heating Value	929.30
N-Pentane	0.205	0.0739		
Hexane	0.207	0.0846		
Heptane	0.000	0.0000	C2+ Liquid Content	2.4015
Octane	0.000	0.0000	C5+ Liquid Content	0.2073
Nonane	0.000	0.0000	C6+ Liquid Content	0.0846
Decane	0.000	0.0000	26# Gasoline	
Oxygen	0.005	0.0004	H2S ppm	
Hydrogen	0.000	0.0000		
Helium	1.517	0.0000		
Argon	0.000			
Water Vapor	0.000	0.0000		
Hydrogen Sulfide	0.000000			
Total	100.000	16.6259		

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