

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

Type Test:

- Open Flow  
 Deliverability

Test Date:  
12/23/2015

API No. 15  
025-20721 -0000

(See Instructions on Reverse Side)

Company MIDCO Exploration, Inc.			Lease Baker		Well Number #1
County CLARK	Location C SW/4	Section 20	TWP 33S	RNG (E/W) 24W	Acres Attributed
Field ACRES WEST		Reservoir CHESTER	Gas Gathering Connection CLARCO		
Completion Date 12/17/1988		Plug Back Total Depth		Packer Set at	
Casing Size 4 1/2	Weight 10.5	Internal Diameter 4.052	Set at 5744	Perforations 5408	To 5416
Tubing Size 2 3/8	Weight 4.7	Internal Diameter 1.995	Set at 5502	Perforations	To
Type Completion (Describe) SINGLE GAS		Type Fluid Production WATER		Pump Unit or Traveling Plunger? Yes / No PUMPING UNIT	
Producing Thru (Annulus / Tubing) CASING		% Carbon Dioxide 0.24%		% Nitrogen 4.063%	Gas Gravity - G <sub>g</sub> .6933
Vertical Depth(H) 5442		Pressure Taps FLANGE			(Meter Run) (Prover) Size 2"
Pressure Buildup: Shut in 12/22 20 15 at 10:00 (AM) (PM) Taken 12/23 20 15 at 10:00 (AM) (PM)					
Well on Line: Started 12/23 20 15 at 10:00 (AM) (PM) Taken _____ 20 _____ at _____ (AM) (PM)					

### OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

Static / Dynamic Property	Orifice Size (Inches)	Circle one: Meter Prover Pressure psig (P <sub>m</sub> )	Pressure Differential in Inches H <sub>2</sub> O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						125					
Flow											

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Grav'ty Factor F <sub>g</sub>	Flowing Temperature Factor F <sub>t</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>o</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P<sub>o</sub>)<sup>2</sup> = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ :

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>o</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	Choose formula 1 or 2: 1. P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup> 2. P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup> divided by: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	LOG of formula 1, or 2, and divide by: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG [ ]	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 5th day of February, 20 16.

**KCC WICHITA**

**FEB 08 2016**

Witness (if any)

For Company

For Commission

Checked by

**RECEIVED**

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 MIDCO 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 Baker #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 Cocket 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: 02/05/2016

KCC WICHITA  
FEB 08 2016  
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Signature:  \_\_\_\_\_  
Title: Earl J. Joyce Jr., Vice-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.

Conservation Division  
266 N. Main St., Ste. 220  
Wichita, KS 67202-1513



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Jay Scott Emler, Chairman  
Shari Feist Albrecht, Commissioner  
Pat Apple, Commissioner

Sam Brownback, Governor

February 1, 2016

Earl Joyce  
MIDCO Exploration, Inc.  
P.O. Box 1278  
Westmont, IL. 60559-1278

RE: *Denial of 2015 Annual Testing Exemption to the Baker #1 Gas Well;*

Dear Mr. Joyce:

I don't believe that I've had to deny hardly any of MIDCO Exploration's past annual exemption-claims. But, the one submitted for your Baker #1 gas well is one that I need to get "*fixed*" before I can grant the exemption. The problem with it centers around the **Plug Back Total Depth** of **4858** provided on the front side of the G-2 form when considered in conjunction with the depth interval provided for the casing perforations and also the identity of the producing reservoir. The perforations are supposed to be between **5475** and **5480**. The top of the **Chester** should be somewhere around **5460** or in that vicinity.

So, there seems to be a built-in inconsistency.

If that inconsistency can be corrected in whatever manner may be necessary, I can grant the exemption to the well for calendar year 2015. However, should that **Plug Back Total Depth** carried on the front side be the actual depth, then another problem arises because of the lack of well-completion documentation in our files which agrees with that feature of the Baker #1 well's construction. Our documents show the rotary total depth being **5750** which doesn't translate into the **Plug Back Total Depth** being as shallow as **4858**. Transposing the numbers given for the **Plug Back Total Depth** to **5848** won't fit with the existing well-completion information, either. Lastly, you don't show the presence of a downhole packer which might explain the **Plug Back Total Depth** entry.

I'll await your response to this denial. I apologize if past years' annual exemption-claims pertaining to the Baker #1 gas well all possessed the same defect and I never brought this inconsistency to MIDCO Exploration's attention. I've been able to spend a little more time this year on screening the submitted 2015 claims for any possible mistakes or inconsistencies. Thank you for your immediate attention to this matter and for your cooperation in rectifying it.

1992  
2003  
2011  
5475 (5416)  
5480 (5408)  
3 GRADES

Sincerely,

Jim Hemmen  
Research Analyst

KCC WICHITA

FEB 08 2016

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