

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

Type Test:

- Open Flow  
 Deliverability

Test Date:  
5/18/11

API No. 15  
15-185-23657-00-00

Company <b>Oil Producers, Inc. of Kansas</b>		Lease <b>Vosburgh</b>		Well Number <b>1-2</b>	
County <b>Stafford</b>	Location <b>2970'FSL&amp;1980'FEL</b>	Section <b>02</b>	TWP <b>24S</b>	RNG (EAW) <b>15W</b>	Acres Attributed
Field <b>Hearn</b>		Reservoir <b>Viola/Simpson</b>		Gas Gathering Connection <b>Lumen Energy</b>	
Completion Date <b>2/22/11</b>		Plug Back Total Depth <b>4182</b>		Packer Set at <b>none</b>	
Casing Size <b>4.5</b>	Weight	Internal Diameter	Set at <b>4220</b>	Perforations <b>4062</b>	To <b>4131</b>
Tubing Size <b>2.375</b>	Weight	Internal Diameter	Set at <b>4054</b>	Perforations	To
Type Completion (Describe) <b>Commingled (Gas)</b>		Type Fluid Production <b>SW</b>		Pump Unit or Traveling Plunger? Yes / No <b>no - flowing</b>	
Producing Thru (Annulus / Tubing) <b>casing</b>		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H)		Pressure Taps		(Meter Run) (Prover) Size	

Pressure Buildup: Shut in 5/17 20 11 at 9:45AM (AM) (PM) Taken 5/18 20 11 at 9:45AM (AM) (PM)  
Well on Line: Started \_\_\_\_\_ 20 \_\_\_\_ at \_\_\_\_\_ (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 (Pm)	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>t</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in						361.5	375.9			24	
Flow											

**FLOW STREAM ATTRIBUTES**

Plate Coefficient (F <sub>s</sub> ) (F <sub>a</sub> ) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity 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>a</sub>)<sup>2</sup> = 0.207

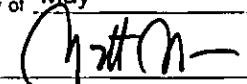
(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</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>a</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>d</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>a</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: $\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	Backpressure Curve Slope = "n" ----- 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 27th day of May, 20 11.

\_\_\_\_\_  
Witness (if any)  
\_\_\_\_\_  
For Commission

  
 For Company  
**G.M. Inc.**  
 Checked by

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**JUL 07 2011**

**KCC WICHITA**

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 Oil Producers, Inc. of Kansas 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.

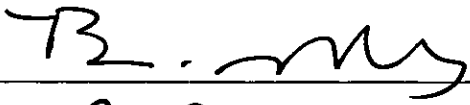
I hereby request a one-year exemption from open flow testing for the Vosburgh 1-2 gas well on the grounds that said well:

(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: 5/27/11

Signature:   
Title: C.O.O.

**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.

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# MEASUREMENT SOLUTIONS INC.

6705 East 81st Street Suite 155 Tulsa, OK 74133  
Telephone 918-493-2700 Fax 918-493-2704

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## GAS ANALYSIS REPORT

<b>METER NUMBER :</b>	999999	<b>SAMPLE TYPE :</b>	SPOT
<b>METER NAME :</b>	VOSBURGH	<b>SAMPLE DATE :</b>	03/18/2011
<b>METER ID :</b>	OIL PRODUCERS	<b>SAMPLE PRES / TEMP :</b>	390 / 52
<b>PRODUCER :</b>		<b>SAMPLED BY :</b>	GM
<b>COMPANY :</b>	OIL PRODUCERS	<b>EFFECTIVE DATE :</b>	03/01/2011

<u>COMPONENT</u>	<u>PERCENT</u>	<u>BTU VALUES @ 14.65</u>		<u>BTU VALUES @ 14.73</u>		
Hellum	He	0.6391	REAL DRY 1057.08	REAL DRY	1062.85	
Oxygen	O2	0.0000	REAL WET 1038.58	REAL WET	1044.25	
Hydrogen Sulfide	H2S	0.0000				
Carbon Dioxide	CO2	0.3897				
Nitrogen	N2	4.3448				
Methane	C1	86.1757	<u>GPM VALUES @ 14.65</u>		<u>GPM VALUES @ 14.73</u>	
Ethane	C2	4.8807	C2	1.2975	C2	1.3046
Propane	C3	2.4148	C3	0.6613	C3	0.6649
I-Butane	iC4	0.3159	iC4	0.1028	iC4	0.1033
N-Butane	nC4	0.5694	nC4	0.1785	nC4	0.1795
I-Pentane	iC5	0.0979	iC5	0.0356	iC5	0.0358
N-Pentane	nC5	0.1056	nC5	0.0380	nC5	0.0382
Hexane Plus	C6+	0.0664	C6+	0.0288	C6+	0.0290
TOTALS	100.0000		2.3425		2.3553	

### SPECIFIC GRAVITY

REAL DRY	0.6401
REAL WET	0.6398

### COMPRESSIBILITY FACTOR

Z FACTOR DRY	0.9977
Z FACTOR WET	0.9976

### GALLONS PER THOUSAND

<u>GPM TOTALS @ 14.65</u>	
C2 + GPM	2.3425
C3 + PGM	1.0450
C4 + GPM	0.3837
C5 + GPM	0.1024

<u>GPM TOTALS @ 14.73</u>	
C2 + GPM	2.3553
C3 + PGM	1.0507
C4 + GPM	0.3858
C5 + GPM	0.1030

COMMENTS :

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