

**Kansas Corporation Commission**  
**One Point Stabilized Open Flow or Deliverability Test**

Form G 2  
(Rev. 7/03)

Type Test:

- Open Flow  
 Deliverability

Test Date: **01/15/2011** API No. **1508121920000**

Company <b>OXY USA Inc</b>		Lease <b>ZM FARMS A 4</b>			Well Number	
County <b>Haskell</b>	Location <b>1650' FNL &amp; 330' FWL</b>	Section <b>11</b>	TWP <b>30S</b>	RNG (E/W) <b>32W</b>	Acres Attributed <b>640</b>	
Field <b>LOCKPORT</b>		Reservoir <b>St Louis</b>		Gas Gathering Connection <b>ONEOK</b>		
Completion Date <b>11/10/1010</b>		Plug Back Total Depth <b>5,673'</b>		Packer Set at		
Casing Size <b>5 1/2"</b>	Weight <b>17.0#</b>	Internal Diameter <b>4.892"</b>	Set at <b>5,717'</b>	Perforations <b>5,308'</b>	To <b>5,322'</b>	
Tubing Size <b>2 3/8"</b>	Weight <b>4.7#</b>	Internal Diameter <b>1.995"</b>	Set at <b>5,267'</b>	Perforations	To	
Type Completion (Describe) <b>SINGLE-GAS</b>		Type Fluid Production <b>WATER</b>		Pump Unit or Traveling Plunger?		Yes / No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Producing Thru (Annulus / Tubing) <b>Tubing</b>		% Carbon Dioxide <b>0.100%</b>		% Nitrogen <b>14.857%</b>		Gas Gravity Gg <b>0.72</b>
Vertical Depth (H) <b>5,315'</b>		Pressure Taps <b>Flange</b>		(Meter Run) (Prover) Size <b>3.068"</b>		
Pressure Buildup: Shut in <b>01/11</b> <b>20 11</b> at <b>8:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Taken <b>01/14</b> <b>20 11</b> at <b>8:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM						
Well on Line: Started <b>01/18</b> <b>20 10</b> at <b>8:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Taken <b>01/19</b> <b>20 10</b> at <b>8:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> 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 <sub>2</sub> O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>e</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>e</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut In						<b>678.0</b>	<b>692.4</b>	<b>678.0</b>	<b>692.4</b>	<b>72</b>	<b>0</b>
Flow	<b>1.250</b>	<b>62.3</b>	<b>18.1</b>	<b>43</b>	<b>75</b>	<b>490.6</b>	<b>505.0</b>	<b>463.9</b>	<b>478.3</b>	<b>24</b>	<b>0</b>

**FLOW STREAM ATTRIBUTES**

Plate Coefficient (F <sub>s</sub> ) (F <sub>p</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>
<b>7.7710</b>	<b>76.7</b>	<b>37.26</b>	<b>1.1785</b>	<b>1.0168</b>	<b>1.0075</b>	<b>350</b>		

**(OPEN FLOW) (DELIVERABILITY) CALCULATIONS**


$(P_c)^2 = 479.4$  ;  $(P_w)^2 = 255.0$  ;  $P_d =$  \_\_\_\_\_ %  $(P_c 14.4) + 14.4 =$  \_\_\_\_\_ ;  $(P_s)^2 = 0.207$   
 $(P_d)^2 = 0$

(P <sub>c</sub> ) <sup>2</sup> (P <sub>e</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>e</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:	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
<b>479.2</b>	<b>224.4</b>	<b>2.1353</b>	<b>0.3295</b>	<b>0.8190</b>	<b>0.2699</b>	<b>1.8617</b>	<b>652</b>

Open Flow **652** 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 **17** day of **January**, **2011**.

\_\_\_\_\_  
 Witness  
 \_\_\_\_\_  
 For Commission

**OXY USA INC**  
 For Company  
  
**Tom Acton - OXY USA Inc.**  
 Checked by

**RECEIVED**  
**JAN 18 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 \_\_\_\_\_ 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 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 a 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: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

**Instructions:** If a gas well meets one of the eligibility criteria set out in the 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 31st 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.

RECEIVED  
JAN 18 2011  
KCC WICHITA

## Gas Analysis Certificate Report

<b>Well Name:</b>	Z M Farms A-4	<b>Alternate ID:</b>	
<b>Analysis ID:</b>		<b>Company Name:</b>	OXY USA Inc.

<b>Effective Date:</b>	12/1/10 1:29 PM	<b>Saturated HV:</b>	993.2	<b>Sample Date:</b>	12/1/10
<b>Valid Through Date:</b>	12/02/11	<b>As Delivered HV:</b>		<b>Sample ID:</b>	
<b>Last Update:</b>	12/2/10 12:00 PM	<b>Dry HV:</b>	993.2	<b>Sample Type:</b>	SPOT
<b>Data Acquisition:</b>		<b>Gravity:</b>	0.7140	<b>Sample Pressure Base:</b>	14.730
<b>Data Source:</b>		<b>Status:</b>	ACTIVE	<b>Sample Temperature:</b>	0.0
				<b>Sample Pressure:</b>	0.0

Component	% Mol	GPM	
Methane	73.1230	12.3936	Gravity - Dry
Ethane	5.8740	1.5699	Gravity - Saturated
Propane	3.6400	1.0022	
I Butane	0.5870	0.1920	
N Butane	0.9310	0.2935	
I Pentane	0.1880	0.0688	
N Pentane	0.1900	0.0688	
Hexane	0.1190	0.0489	
Heptane	0.0000	0.0000	
Octane	0.0000	0.0000	
Nonane	0.0000	0.0000	
Decane	0.0000	0.0000	
Nitrogen	15.0630	1.6568	
CO2	0.0670	0.0114	
Oxygen	0.0000	0.0000	
H2O	0.0000	0.0000	
CO	0.0000	0.0000	
H2S	0.0000	0.0000	
Hydrogen	0.0000	0.0000	
Helium	0.2180	0.0000	
Argon	0.0000	0.0000	
<b>Total</b>	<b>100.0000</b>	<b>17.3059</b>	

Sample Comments:

Configuration Comments:

**RECEIVED**  
**JAN 18 2011**  
**KCC WICHITA**



**OXY USA Inc.**  
A subsidiary of Occidental Petroleum Corporation

5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521  
P.O. Box 27570, Houston, Texas 77227-7570

Tom Acton  
Mid-Continent Business Unit

Phone: 713-215-7623  
Fax: 713-350-4873

January 17, 2011

Jim Hemmen  
Finney State Office Building  
130 S. Market, Room 2078  
Wichita, KS 67202-3802

Dear Mr. Hemmen:

Please find enclosed, the One Point & Four Point Stabilized Open Flow/Deliverability Test, Multipoint Back Pressure Test, and Gas Analysis Certificate for the following well:

**Z M FARME A-4**

Section 11-T30S-R32W

Due to the inaccuracy's done on the first test buy an outside vendor OXY requested a second test done. If you have any questions or concerns please contact me at any time.

Regards,

Tom Acton  
Gas Flow Coordinator

Enclosures: 2010 Form G-2/CG-1  
Gas Analysis Certificate

Cc: New Well Test File

RECEIVED  
JAN 18 2011  
KCC WICHITA