

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

Form G 2  
(Rev. 7/03)

Type Test:

- Open Flow  
 Deliverability

(See Instructions on Reverse Side)

Test Date: **05/17/2013** API No. **15081219270000**

Company <b>OXY USA Inc</b>		Lease <b>LANGBOTHAM 5</b>			Well Number	
County <b>Haskell</b>	Location <b>330' FSL &amp; 1070' FWL</b>	Section <b>3</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>02/11/2011</b>		Plug Back Total Depth <b>5,634'</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>5,688'</b>	Perforations <b>5,552'</b>	To <b>5,561'</b>	
Tubing Size <b>2 3/8"</b>	Weight <b>4.7#</b>	Internal Diameter <b>1.995"</b>	Set at <b>5,612'</b>	Perforations	To	
Type Completion (Describe) <b>SINGLE-GAS</b>		Type Fluid Production <b>WATER/OIL</b>		Pump Unit or Traveling Plunger?		Yes / No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Producing Thru (Annulus / Tubing) <b>Annulus</b>		% Carbon Dioxide <b>0.083%</b>		% Nitrogen <b>11.866%</b>		Gas Gravity Gg <b>0.7</b>
Vertical Depth (H) <b>5,557'</b>		Pressure Taps <b>Flange</b>		(Meter Run) (Prover) Size <b>3.068"</b>		
Pressure Buildup: Shut in <b>05/13</b> 20 <b>13</b> at <b>9:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Taken <b>05/16</b> 20 <b>13</b> at <b>9:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM						
Well on Line: Started <b>05/16</b> 20 <b>13</b> at <b>9:00</b> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM Taken <b>05/17</b> 20 <b>13</b> at <b>9:00</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 or 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>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut In						<b>165.0</b>	<b>179.4</b>	<b>125.0</b>	<b>139</b>	<b>72</b>	<b>0</b>
Flow	<b>1.500</b>	<b>39.4</b>	<b>6.4</b>	<b>59</b>	<b>59</b>	<b>145.0</b>	<b>159.4</b>	<b>65.0</b>	<b>79.4</b>	<b>24</b>	<b>0</b>

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>b</sub> ) (F <sub>p</sub> ) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F <sub>g</sub>	Flowing Temperature Factor F <sub>t</sub>	Deviation Factor F <sub>pw</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/Barrel)	Flowing Fluid Gravity G <sub>m</sub>
<b>11.4100</b>	<b>53.8</b>	<b>18.56</b>	<b>1.1952</b>	<b>1.0010</b>	<b>1.0047</b>	<b>255</b>	<b>None</b>	<b>0.717</b>

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = **32.2** ; (P<sub>w</sub>)<sup>2</sup> = **25.4** ; P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> 14.4) + 14.4 = \_\_\_\_\_ ; (P<sub>a</sub>)<sup>2</sup> = **0.207**  
(P<sub>d</sub>)<sup>2</sup> = **0**

(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>c</sub> ) <sup>2</sup> (P <sub>w</sub> ) <sup>2</sup>	Choose Formula 1 or 2: 1. P <sub>c</sub> 2 P <sub>a</sub> 2 2. P <sub>c</sub> 2 P <sub>d</sub> 2 divided by: P <sub>c</sub> 2 P <sub>w</sub> 2	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>32</b>	<b>6.8</b>	<b>4.7167</b>	<b>0.6736</b>	<b>0.6305</b>	<b>0.4247</b>	<b>2.6589</b>	<b>678</b>

Open Flow **678** 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 **29** day of **October**, **2013**

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

**OXY USA INC**  
For Company  
**KCC WICHITA**  
Aimee Lannou - OXY USA Inc. *Aimee Lannou*  
Checked by  
**NOV 04 2013**  
**RECEIVED**