


KANSAS CORPORATION COMMISSION

Form G-2  
(Rev. 7/03)

ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test: Initial

Test Date: 8/24/2011

API No. 15 - 15-189-20711 - 

Open Flow

Deliverability

Company <u>ExxonMobil Oil Corporation</u>		Lease <u>Haworth</u>		Well Number <u>2-3</u>	
County <u>Stevens</u>	Location <u>NE NE NW</u>	Section <u>24</u>	TWP <u>34S</u>	RNG (E/W) <u>36W</u>	Acres Attributed <u>640</u>
Field <u>Hugoton</u>		Reservoir <u>Chase</u>		Gas Gathering Connection <u>Oneok Field Services</u>	
Completion Date <u>7/29/2011</u>		Plug Back Total Depth <u>2790</u>		Packer Set at <u>none</u>	
Casing Size <u>5.5</u>	Weight <u>15.5</u>	Internal Diameter <u>5.012</u>	Set at <u>3300</u>	Perforations <u>2676</u>	To <u>2760</u>
Tubing Size <u>2 3/8</u>	Weight <u>2 3/8</u>	Internal Diameter <u>1.995</u>	Set at <u>2759</u>	Perforations <u>None</u>	To <u>None</u>
Type Completion (Describe) <u>Workover Gas Re-perf</u>		Type Fluid Production <u>Salt water</u>		Pump Unit or Traveling Plunger? <input checked="" type="checkbox"/> Yes / No	
Producing Thru (Annulus / Tubing) <u>Annulus</u>		% Carbon Dioxide <u>0.0490</u>		% Nitrogen <u>14.8670</u>	
Vertical Depth (H) <u>6550</u>		Pressure Taps <u>Flange</u>		(Meter Run) (Prover) Size <u>2.067 in.</u>	
Pressure Buildup: Shut in <u>Aug 24</u> 20 <u>11</u> at <u>8:00 AM</u> taken <u>Aug 26</u> 20 <u>11</u> at <u>8:00 AM</u>					
Well on Line: Started <u>Aug 26</u> 20 <u>11</u> at <u>8:00 AM</u> taken <u>Aug 27</u> 20 <u>11</u> at <u>8:00 AM</u>					

OBSERVED SURFACE DATA

Duration of Shut-in 48 Hours

Static/Dynamic Property	Orifice Size inches	Circle One Meter or Prover Pressure psig	Pressure Differential in (h) inches H O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> )(P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> )(P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in	0.750	63.0	0			63.2	77.6	0	14.4	48	125
Flow	0.750	2.1	6.0			2.3	16.7	0	14.4	24	125

FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>b</sub> )(F <sub>p</sub> ) Mcfd	Circle One Meter or Prover Pressure psig	Press Extension $\sqrt{P_m \times h_w}$	Gravity Factor F g	Flowing Temperature Factor F <sub>ft</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
2.779	16.5	40.4165807				31.8		

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 6021.76 ; (P<sub>w</sub>)<sup>2</sup> = 278.89 ; P<sub>d</sub> = 14.4 % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ ; (P<sub>a</sub>)<sup>2</sup> = 0.207 ; (P<sub>d</sub>)<sup>2</sup> = 207

$\frac{(P_c)^2 (P_a)^2}{(P_c)^2 (P_d)^2}$	(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>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: [P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> ]	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog Mcfd
5814.76	5742.87	1.012518131	0.00540280	0.85	0.00459238	1.01063046	0.027317342
5814.76	5742.87	1.012518131	0.00540280	0.85	0.00459238	1.01063046	0.027317342

Open Flow 32.13804892 Mcfd @ 14.65 psia      Deliverability 32.13804892 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 8th day of November 2011

\_\_\_\_\_  
Witness (if any)

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

**RECEIVED**  
NOV 09 2011

Chris Broughton  
For Company

*Bruce Rappold*  
Checked by

**KCC WICHITA**