

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

Open Flow

Deliverability

**24 Hr Shut In Test** Test Date: 10/26/2013

API No. 15  
15-189-22571-0000

Company <b>PALMER OIL, INC.</b>		Lease <b>JOYCE</b>		Well Number <b>#14-1</b>	
County <b>STEVENS</b>	Location <b>SW-SW-NW</b>	Section <b>14</b>	TWP <b>31S</b>	RNG (E/W) <b>36W</b>	Acres Attributed
Field <b>CAVE WEST</b>		Reservoir <b>ATOKA</b>	Gas Gathering Connection <b>ANDARKO PETROLEUM CORP.</b>		
Completion Date <b>03/10/2007</b>		Plug Back Total Depth <b>6192</b>	Packer Set at <b>NONE</b>		
Casing Size <b>4.50</b>	Weight <b>10.50</b>	Internal Diameter <b>4.052</b>	Set at <b>6396</b>	Perforations <b>5530</b>	To <b>5536</b>
Tubing Size <b>2.375</b>	Weight <b>4.70</b>	Internal Diameter <b>1.995</b>	Set at <b>6189</b>	Perforations	To
Type Completion (Describe) <b>(GAS) Single</b>		Type Fluid Production <b>FORMATION WATER</b>	Pump Unit or Traveling Plunger? <b>Pumping Unit</b>		Yes / No <b>X</b>
Producing Thru (Annulus / Tubing) <b>TUBING</b>		% Carbon Dioxide	% Nitrogen <b>0</b>		Gas Gravity - G <sub>g</sub>
Vertical Depth(H)		Pressure Taps		(Meter Run) (Prover) Size	
Pressure Buildup: Shut in <b>10/26</b> 20 <b>13</b> at <b>9:09 AM</b> (AM) (PM) Taken <b>10/27</b> 20 <b>13</b> at <b>9:15 PM</b> (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 (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>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						335					
Flow						330					

### 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>tt</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>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>a</sub>)<sup>2</sup> = 0.207 (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(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>a</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" ----- or ----- 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 **30** day of **OCTOBER**, 20 **13**

Witness (if any)

For Commission

**Shelley Case** KCC WICHITA  
For Company  
**Gus Schwaderek**  
Checked by

NOV 27 2013

RECEIVED