

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

Type Test:

- Open Flow  
 Deliverability

Test Date:  
5/13 to 5/14/13

API No. 15  
069-20341-00-00

Company Falcon Exploration, Inc		Lease John Koehn		Well Number 1-18	
County Gray	Location S/2SWNWSE	Section 18	TWP 28S	RNG (E/W) 29W	Acres Attributed
Field WC		Reservoir Stotter <u>Lime</u>		Gas Gathering Connection Oneok	
Completion Date 12/14/11		Plug Back Total Depth 3541		Packer Set at none	
Casing Size 4.5	Weight	Internal Diameter	Set at 3652	Perforations 3523	To 3529
Tubing Size 2.375	Weight	Internal Diameter	Set at 3513	Perforations	To
Type Completion (Describe) single		Type Fluid Production SW		Pump Unit or Traveling Plunger? Yes / No no - <u>Flowing</u>	
Producing Thru (Annulus / Tubing) Tubing		% Carbon Dioxide .02		% Nitrogen 33.84	
Vertical Depth(H)		Pressure Taps flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 5/10 20 13 at 10:00 am (AM) (PM) Taken 5/13 20 13 at 10:00 am (AM) (PM)					
Well on Line: Started 5/13 20 13 at 10:15 am (AM) (PM) Taken 5/14 20 13 at 11:00 am (AM) (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>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						598	612.4	598	612.4	72	
Flow	.750	73	17.3	83		463	477.4	443	457.4	24.75	

### 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>
2.779	87.4	38.88	1.155	.9786	_____	122		.749

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 375.033 : (P<sub>w</sub>)<sup>2</sup> = 227.910 : P<sub>o</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = 0.207  
(P<sub>o</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>o</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>w</sub> <sup>2</sup> 2. P <sub>c</sub> <sup>2</sup> - P <sub>o</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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_o^2}$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
374.826	147.123	2.547	.4060	.831	.3373	2.17	264

Open Flow **264** Mcfd @ 14.65 psia X .50 = Deliverability **132** 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 29th day of May, 20 13.

Witness (if any)

**KCC WICHITA**

*[Signature]*  
KCC, INC.

For Company

JUN 10 2013

RECEIVED