

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

Type Test:

- Open Flow  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
4/28 to 4/29/14

API No. 15  
069-20,357-00-00

Company Falcon Exploration, Inc			Lease Henry Koehn		Well Number 1-13
County Gray	Location CNE	Section 13	TWP 28S	RNG (E/W) 30W	Acres Attributed
Field Renegade SE		Reservoir Stotler	Gas Gathering Connection Oneok		
Completion Date 3/29/12		Plug Back Total Depth 3580	Packer Set at none		
Casing Size 5.5	Weight	Internal Diameter	Set at 3828	Perforations 3541	To 3547
Tubing Size 2.375	Weight	Internal Diameter	Set at 3550	Perforations	To
Type Completion (Describe) Single		Type Fluid Production SW	Pump Unit or Traveling Plunger? Yes / No no		
Producing Thru (Annulus / Tubing) Tubing		% Carbon Dioxide .00	% Nitrogen 30.52	Gas Gravity - G <sub>g</sub> .738	
Vertical Depth(H)		Pressure Taps flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 4/25		20 14 at 10:15 am	(AM) (PM) Taken 4/28	20 14 at 10:15 am	(AM) (PM)
Well on Line: Started 4/28		20 14 at 10:15 am	(AM) (PM) Taken 4/29	20 14 at 10:15 am	(AM) (PM)

**OBSERVED SURFACE DATA**

Duration of Shut-in 72 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>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						597	611.4	442	456.4	72	
Flow	1.000	92	3.7	52		529	543.4	384	398.4	24	

**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>
5.073	106.4	19.84	1.164	1.008	-----	118		

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

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

(P<sub>c</sub>)<sup>2</sup> = 373.809 ; (P<sub>w</sub>)<sup>2</sup> = 295.283 ; P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ ;

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</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>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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
373.602	78.526	4.757	.6773	.779	.5276	3.37	398

Open Flow 398 Mcfd @ 14.65 psia X .50 = Deliverability 199 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 30th day of April, 20 14.

\_\_\_\_\_  
Witness (if any)  
For Commission

\_\_\_\_\_  
For Company  
Checked by  
**KCC WICHITA**

MAY 12 2014  
RECEIVED