

KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

RECEIVED

FEB 25 2014

Type Test:

- Open Flow
- Deliverability

Test Date:
5/16 to 5/17/13

API No. 15
069-20357-00-00

KCC DODGE CITY

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	
Vertical Depth(H)		Pressure Taps flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in <u>5/13</u> 20 <u>13</u> at <u>12:30 pm</u> (AM) (PM) Taken <u>5/16</u> 20 <u>13</u> at <u>12:30 pm</u> (AM) (PM)					
Well on Line: Started <u>5/16</u> 20 <u>13</u> at <u>12:45 pm</u> (AM) (PM) Taken <u>5/17</u> 20 <u>13</u> at <u>12:45 pm</u> (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 ₂ O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P _w) or (P _i) or (P _c)		Tubing Wellhead Pressure (P _w) or (P _i) or (P _c)		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						695	709.4	550	564.4	72	
Flow	1.000	76	4.7	89		637	651.4	497	511.4	24	

FLOW STREAM ATTRIBUTES

Plate Coefficient (F _b) (F _p) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F _g	Flowing Temperature Factor F _{tt}	Deviation Factor F _{pv}	Metered Flow R (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G _m
5.073	90.4	20.61	1.164	.9732	-----	118		.738

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_e)² = 503.248 ; (P_w)² = 424.321 ; P_d = _____ % (P_c - 14.4) + 14.4 = _____ ; (P_a)² = 0.207 ; (P_d)² = _____

(P _c) ² - (P _a) ² or (P _c) ² - (P _d) ²	(P _c) ² - (P _w) ²	Choose formula 1 or 2: 1. P _c ² - P _a ² 2. P _c ² - P _d ² divided by: P _c ² - P _w ²	LOG of formula 1. or 2. and divide by: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability Equals R x Antilog (Mcf/d)
503.041	78.927	6.373	.8043	.779	.6265	4.23	499

Open Flow **499** Mcfd @ 14.65 psia X .50 = Deliverability **249.5** 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.

No witness Richard M. Lutz
Witness (if any)

Ray E. Lutz
For Company

KCC WICHITA

FEB 27 2014

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