

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

Type Test:

- Open Flow  
 Deliverability

Test Date:  
12/29 to 12/30/14

API No. 15  
095-22,274-00-00

Company Wildcat Oil & Gas, LLC		Lease McLeod		Well Number 1	
County Kingman	Location SENWSWNW	Section 11	TWP 30S	RNG (E/W) 08W	Acres Attributed
Field <b>SPIVEY-GRABS</b>		Reservoir Miss.	Gas Gathering Connection Oneok		
Completion Date 11/15/13		Plug Back Total Depth		Packer Set at none	
Casing Size 5.5	Weight	Internal Diameter	Set at 4350	Perforations 4160	To 4200
Tubing Size 2.375	Weight	Internal Diameter	Set at 4145	Perforations	To
Type Completion (Describe) single		Type Fluid Production SW		Pump Unit or Traveling Plunger? Yes / No Yes - pump unit	
Producing Thru (Annulus / Tubing) annulus		% Carbon Dioxide .00		% Nitrogen 3.2867	Gas Gravity - G <sub>g</sub> .696
Vertical Depth(H)		Pressure Taps flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in		12/26	20 14	at 8:45 am	(AM) (PM) Taken
				12/29	20 14
				at 8:45 am	(AM) (PM)
Well on Line: Started		12/29	20 14	at 9:00 am	(AM) (PM) Taken
				12/30	20 14
				at 9:00 am	(AM) (PM)

### OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size (Inches)	Circle one: Meter Prover Pressure pslg (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)
						pslg	psia	pslg	psia		
Shut-In						96	110.4			72	
Flow	.500	42	18	16		74	88.4			24	

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>p</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>
1.219	56.4	31.86	1.199	1.045	-----	48		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 12.188 : (P<sub>w</sub>)<sup>2</sup> = 7.814 : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>d</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(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>d</sub> <sup>2</sup> 2. P <sub>c</sub> <sup>2</sup> - P <sub>w</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" ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
11.981	4.374	2.739	.4376	.889	.3890	2.44	117

Open Flow **117** Mcfd @ 14.65 psia X .50 = Deliverability **58.5** 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 30th day of December, 20 14.

Respectfully,  
KANSAS CORPORATION COMMISSION

*[Signature]*  
For Company

Witness (if any)

JAN 05 2015

For Commission

CONSERVATION DIVISION  
WICHITA, KS

Checked by