

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

Type Test:

(See Instructions on Reverse Side)

- Open Flow
- Deliverability

Test Date:  
6/04 to 6/05/13

API No. 15  
159-19011-00-01

Company Foundation Energy Management			Lease Doug Malone		Well Number 1
County Rice	Location 100WofCNESE	Section 19	TWP 20S	RNG (E/W) 09W	Acres Attributed
Field Chase-Silica		Reservoir Tarkio	Gas Gathering Connection American Energies		
Completion Date 8/01/02 re-completion		Plug Back Total Depth		Packer Set at none	
Casing Size 4.5	Weight	Internal Diameter	Set at 2540	Perforations 2290	To 2296
Tubing Size 2.375	Weight	Internal Diameter	Set at 2290	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 .161	% Nitrogen 25.527	Gas Gravity - G <sub>g</sub> .715	
Vertical Depth(H)		Pressure Taps flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6/01 20 13 at 9:30 am (AM) (PM) Taken 6/04 20 13 at 9:30 am (AM) (PM)					
Well on Line: Started 6/04 20 13 at 9:30 am (AM) (PM) Taken 6/05 20 13 at 9:30 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						129.4	143.8			72	
Flow	.375	40	3.0	64		121.9	136.3			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>
.6860	54.4	12.77	1.183	.9962	_____	10		.715

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 20.678 : (P<sub>w</sub>)<sup>2</sup> = 18.577 : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>a</sub>)<sup>2</sup> = 0.207 (P<sub>o</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>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>a</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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
20.471	2.101	9.743	.9887	.850	.8404	6.92	69
				assigned			

Open Flow **69**

Mcfd @ 14.65 psia

Deliverability **69**

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 6th day of June, 20 13.

**KCC WICHITA**

Witness (if any)

JUN 10 2013

RECEIVED

*[Signature]*  
For Company