

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

Type Test.

(See Instructions on Reverse Side)

- Open Flow  
 Deliverability

Test Date  
9/12 to 9/13/14

API No 15  
025-10073-00-00

Company <b>Benchmark Energy, LLC</b>			Lease Threis		Well Number J-2
County Clark	Location CSE	Section 34	TWP 34S	RNG (E/W) 25W	Acres Attributed
Field McKinney		Reservoir Miss		Gas Gathering Connection DCP	
Completion Date 10/12/57		Plug Back Total Depth 5882		Packer Set at none	
Casing Size 4.5	Weight	Internal Diameter	Set at 5900	Perforations 5767	To 5781
Tubing Size 2.375	Weight	Internal Diameter	Set at 5750	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		% Nitrogen	Gas Gravity - G <sub>g</sub> .650 est
Vertical Depth(H)			Pressure Taps flange		(Meter Run) (Prover) Size 2"
Pressure Buildup	Shut in	20	14	at 10:00 am (AM) (PM)	Taken 9/12 20 14 at 10:00 am (AM) (PM)
Well on Line	Started	20	14	at 10:00 am (AM) (PM)	Taken 9/13 20 14 at 10:00 am (AM) (PM)

### OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one Meter Prover Pressure psig (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						73.3	87.7			72	
Flow	.375	60	2.1	77		61.3	75.7			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	74.4	12.49	1.240	.9840	-----	10		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>c</sub>)<sup>2</sup> = 7.691      (P<sub>w</sub>)<sup>2</sup> = 5.730      P<sub>d</sub> = \_\_\_\_\_ %      (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</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>d</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 $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
7.484	1.961	3.816	.5816	.850	.4943	3.12	31
				assigned			

Open Flow **31** Mcfd @ 14.65 psia      Deliverability      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 14th day of September, 20 14

Witness (if any)

Received  
KANSAS CORPORATION COMMISSION

*Andrew M. Wilson*  
For Company  
**GLM, INC**  
Checked by

For Commission

**OCT 09 2014**

CONSERVATION DIVISION  
WICHITA, KS