

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

Type Test:

- Open Flow  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
10/15 to 10/16/15

API No. 15  
007-24,139-00-00

Company LB Exploration, Inc.		Lease Boyd		Well Number 2	
County Barber	Location SENWNWNW	Section 34	TWP 32S	RNG (E/W) 13W	Acres Attributed
Field		Reservoir Miss	Gas Gathering Connection Oneok		
Completion Date 3/21/14		Plug Back Total Depth		Packer Set at none	
Casing Size 5.5	Weight	Internal Diameter	Set at 4690	Perforations 4530	To 4580
Tubing Size 2.875	Weight	Internal Diameter	Set at 4528	Perforations	To
Type Completion (Describe) single		Type Fluid Production Oil/SW		Pump Unit or Traveling Plunger? Yes / No yes - pump unit	
Producing Thru (Annulus / Tubing) annulus		% Carbon Dioxide .0591		% Nitrogen 6.979	Gas Gravity - G <sub>g</sub> .674
Vertical Depth(H)		Pressure Taps flange			(Meter Run) (Prover) Size 2"
Pressure Buildup: Shut in		10/12	20	15	at 8:45 am (AM) (PM)
Well on Line: Started		10/15	20	15	at 8:45 am (AM) (PM)
					Taken 10/15 20 15 at 8:45 am (AM) (PM)
					Taken 10/16 20 15 at 8:45 am (AM) (PM)

KCC WICHITA  
OCT 20 2015  
RECEIVED

### OBSERVED SURFACE DATA

Duration of Shut-in 72 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or 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>i</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						267	281.4			72	
Flow	1.250	37	2.3	77		253	267.4			24	

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>v</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>t</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
8.329	51.4	10.87	1.217	.9840		108		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

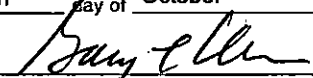
(P<sub>c</sub>)<sup>2</sup> = 79.185 ; (P<sub>w</sub>)<sup>2</sup> = 71.502 ; P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ ; (P<sub>a</sub>)<sup>2</sup> = 0.207 ; (P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)
78.978	7.683	10.279	1.012	.699	.7073	5.09	554

Open Flow **554** Mcfd @ 14.65 psia x .50 = Deliverability **277** 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 16th day of October, 20 15.

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

  
\_\_\_\_\_  
For Company  
Colm, Inc.  
\_\_\_\_\_  
Checked by