

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

FORM G-2  
(Rev. 8/98)

TYPE TEST:

- Open Flow  
 Deliverability

TEST DATE: 9/4

API No. <sup>15-</sup> 057-20588-0000

Company Ritchie Exploration		Lease Lamb-Lance		Well Number Lamb-Lan 1	
County Ford	Location W/2 NW NE	Section 8	TWP 28s	RNG (E/W) 22w	Acres Attributed 640
Field Lamb	Reservoir Mississippian	Gas Gathering Connection Superior Pipeline			
Completion Date 6-25-10	Plug Back Total Depth 5272	Packer Set at			
Casing Size 4.500	Weight 10.500	Internal Diameter 4.052	Set at 5302	Perforations 5024	To 5029
Tubing Size 2.375	Weight 4.700	Internal Diameter 1.995	Set at 5015	Perforations	To
Type Completion (Describe) New Well	Type Fluid Production none	Pump Unit or Traveling Plunger? NO			
Producing Thru (Annulus/Tubing) tubing	% Carbon Dioxide 0.103	% Nitrogen 9.155		Gas Gravity- Gg 0.659	
Vertical Depth (H) 5026	Pressure Taps flange	Meter Run Size 3.067			
Pressure Buildup: Shut in	8/31/2013@1100	TAKEN	9/3/2013@1500		
Well on Line: Started	9/3/2013@1510	TAKEN	9/4/2013@1405		

**OBSERVED SURFACE DATA**

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H <sub>2</sub> O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Tubing WellHead Press. (P <sub>w</sub> ) (P <sub>t</sub> ) (P <sub>c</sub> )		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						720	734	719	733	76.0	
Flow	1.500	27.5	45.50	73		363	377	347	361	23.0	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>b</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
11.410	41.9	43.66	1.2318	0.9877	1.0029	607		0.659

**(OPEN FLOW)(DELIVERABILITY) CALCULATIONS**

(P<sub>c</sub>)<sup>2</sup> = 539.3      (P<sub>w</sub>)<sup>2</sup> = 142.4      P<sub>d</sub> = 1.8      %      (P<sub>c</sub> - 14.4) + 14.4 =      (P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = 0.17

$(P_c)^2 - (P_a)^2$ or $(P_c)^2 - (P_d)^2$	$(P_c)^2 - (P_w)^2$	$\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_d)^2}$ or $\frac{(P_c)^2 - (P_a)^2}{(P_c)^2 - (P_w)^2}$	LOG	Backpressure Curve Slope "n" ----- or ----- Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability = R x Antilog Mcf/d
539.14	396.91	1.358	0.1330	0.803	0.1068	1.279	777
539.18	396.91	1.358	0.1330	0.803	0.1068	1.279	777

OPEN FLOW      777      Mcfd @ 14.65 psia      DELIVERABILITY      777      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 herein and that said report is true and correct. Executed this the \_\_\_\_\_ day of Sept, 2013

Witness (if any)  
No Witness  
For Commission

**KCC WICHITA**

**SEP 23 2013**

**RECEIVED**

\_\_\_\_\_  
For Company  
\_\_\_\_\_  
Checked by