

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

FORM G-2  
(Rev. 8/98)

TYPE TEST:

- Open Flow  
 Deliverability

TEST DATE: 1/11/2012

API No. 057-20588-0000

Company Ritchie Exploration		Lease Lamb-Lance			Well Number 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	1/6/2012@1100		TAKEN	1/10/2012@1400		
Well on Line: Started	1/11/2012@1400		TAKEN	1/12/2012@1400		

**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						865	879	871	885	75.0	
Flow	1.500	34.4	35.10	65		639	654	599	613	24.0	

**FLOW STREAM ATTRIBUTES**

COEFFICIENT (F <sub>D</sub> ) Mcf/d	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR F <sub>g</sub>	FLOWING TEMP FACTOR F <sub>t</sub>	DEVIATION FACTOR F <sub>pv</sub>	RATE OF FLOW R Mcf/d	GOR	G <sub>m</sub>
11.410	48.8	41.39	1.2318	0.9952	1.0038	581		0.659

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

(P<sub>c</sub>)<sup>2</sup> = 774.2      (P<sub>w</sub>)<sup>2</sup> = 427.7      P<sub>d</sub> = 3.9      %      (P<sub>c</sub> - 14.4) + 14.4 =

(P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = 1.18

$(P_c)^2 - (P_a)^2$ 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
774.02	346.51	2.234	0.3490	0.803	0.2803	1.907	1108
773.04	346.51	2.231	0.3485	0.803	0.2798	1.905	1106

OPEN FLOW      1108      Mcfd @ 14.65 psia      DELIVERABILITY      1106      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 15 day of Jan, 2012

**RECEIVED**

JAN 17 2012

Witness (if any)

For Commission

For Company

Checked by

**KCC WICHITA**