KANSAS CORPORATION COMMISSION
ONE POINT STABLIZED OPEN FLOW OR DELIVERABILITY TEST

FORM G-2 (Rev.8/98)

TYPE TEST:

☒ Open Flow

☒ Deliverability

TEST DATE: 1/11/2012

API No 15 - 057-20611-0000

Company	Lease	Well Number
Ritchie Exploration	Stephenson	4B

County	Location	Section	TWP	RNG(E/W)	Acres Attributed
Ford	SE NW NW	4	28s	22w	640

Field	Reservoir	Gas Gathering Connection
Lamb North	Mississippian	Superior Pipeline

Completion Date	Plug Back Total Depth	Packer Set at
7-1-10	5165	

Casing Size	Weight	Internal Diameter	Set at	Perforations	To
4.500	10.500	4.052	5187	4968	4991

Tubing Size	Weight	Internal Diameter	Set at	Perforations	To
2.375	4.700	1.995	4992		

Type Completion (Describe)	Type Fluid Production	Pump Unit or Traveling Plunger?
New Well	None	no

Producing Thru (Annulus/Tubing)	% Carbon Dioxide	% Nitrogen	Gas Gravity- Gg
tubing	0.087	9.531	0.662

Vertical Depth (H)	Pressure Taps	Meter Run Size
4979	flange	3.067

Pressure Buildup: Shut in	1/6/2012@ 1030	TAKEN	1/10/2012@1330
Well on Line: Started	1/10/2012@ 1330	TAKEN	1/11/2012@1330

OBSERVED SURFACE DATA

Static/ Dynamic Property	Orifice Size in.	Meter Pressure psig	Pressure Diff. In. H $_2$O	Flowing Temp. t.	WellHead Temp. t.	Casing WellHead Press. (P_w) (P_t) (P_c) psig	Casing WellHead Press. psia	Tubing WellHead Press. (P_w) (P_t) (P_c) psig	Tubing WellHead Press. psia	Duration (Hours)	Liquid Prod. Barrels
Shut-in						1202	1217	1201	1216	75.0	
Flow	1.625	50.0	35.20	61		929	943	899	914	24.0	

FLOW STREAM ATTRIBUTES

COEFFICIENT (F_b) Mcfd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mcfd	GOR	G_m
13.580	64.4	47.61	1.2291	0.9990	1.0052	798		0.662

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P_c)^2 = 1481.8 (P_w)^2 = 890.8 Pd = 4.1 % (P_c - 14.4) + 14.4 = (P_a)^2 = 0.207 (P_d)^2 = 2.50

(P_c)^2 - (P_a)^2 or (P_c)^2 - (P_d)^2	(P_c)^2 - (P_w)^2	[(P_c)^2 - (P_a)^2 or (P_c)^2 - (P_d)^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 Mcfd
1481.61	591.06	2.507	0.3991	1.000	0.3991	2.507	2000
1479.32	591.06	2.503	0.3984	1.000	0.3984	2.503	1997

OPEN FLOW 2000 Mcfd @ 14.65 psia DELIVERABILITY 1997 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 13 day of Jan, 20 12

RECEIVED
JAN 20 2012
KCC WICHITA

Witness (if any)

For Company

For Commission

Checked by