

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

FORM G-2
(Rev.8/98)

TYPE TEST:

- Open Flow
 Deliverability

TEST DATE: 12/16/2013

API No. 15-057-20765 -00-00

Company Ritchie Exploration		Lease #1 Henry			Well Number 18BC	
County Ford	Location 2376' FWL 960		Section 18	TWP 27s	RNG(E/W) 22 W	Acres Attributed 640
Field Fox Ridge		Reservoir Huck		Gas Gathering Connection Ford Gathering Sys		
Completion Date 2/2012		Plug Back Total Depth 5280		Packer Set at none		
Casing Size 5.500	Weight 15.500	Internal Diameter 4.950	Set at 5300	Perforations 4992	To 4996	
Tubing Size 2.875	Weight 6.500	Internal Diameter 2.441	Set at 4975	Perforations	To	
Type Completion (Describe) Acid		Type Fluid Production Oil/Water		Pump Unit or Traveling Plunger? pumping unit		
Producing Thru (Annulus/Tubing) annulus		% Carbon Dioxide 0.230		% Nitrogen 13.260		Gas Gravity- Gg 0.680
Vertical Depth (ft) 4994		Pressure Taps flange		Meter Run Size 3.068		
Pressure Buildup: Shut in		12/12/2013 @ 12:30		TAKEN	12/15/2013 @ 1300	
Well on Line: Started		12/15/2013 @ 1300		TAKEN	12/16/2013 @ 1300	

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 _c) (P _o)		Tubing WellHead Press. (P _w) (P _t) (P _o)		Duration (Hours)	Liquid Prod. Barrels
						psig	psia	psig	psia		
Shut-in						53	67	95	109		
Flow	1.000	24.0	1.10	37		38	52	37	51	24.0	2.5

FLOW STREAM ATTRIBUTES

COEFFICIENT (F _b) Mofd	(METER) PRESSURE psia	EXTENSION $\sqrt{P_m \times H_w}$	GRAVITY FACTOR Fg	FLOWING TEMP FACTOR Ft	DEVIATION FACTOR Fpv	RATE OF FLOW R Mofd	GOR	G _m
4.912	38.4	6.50	1.2127	1.0229	1.0035	39	15895	0.925

(OPEN FLOW)(DELIVERABILITY) CALCULATIONS

(P_o)² = 12.0 (P_w)² = 2.6 P_d = 21.9 & (P_c - 14.4) + 14.4 = (P_a)² = 0.207
(P_d)² = 0.58

$(P_o)^2 - (P_a)^2$ or $(P_o)^2 - (P_d)^2$	$(P_o)^2 - (P_w)^2$	$\frac{(P_o)^2 - (P_a)^2}{(P_o)^2 - (P_d)^2}$ OR $\frac{(P_o)^2 - (P_a)^2}{(P_o)^2 - (P_w)^2}$	LOG []	Backpressure Curve Slope ⁿ ---- or ---- Assigned Standard Slope	n x LOG []	Antilog	Open Flow Deliverability = R x Antilog Mofd
11.76	9.33	1.261	0.1007	0.850	0.0856	1.218	48
11.39	9.33	1.222	0.0869	0.850	0.0739	1.185	47

OPEN FLOW 48 Mofd @ 14.65 psia DELIVERABILITY 47 Mofd @ 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 _____, 20____

Witness (if any)

For Commission

KCC WICHITA
JUL 23 2014
RECEIVED

For Company

Checked by